

WIRELESS NETWORK CAMERA

USER'S GUIDE
ENGLISH VERSION 3.0



 **LIVE**

LNC100 Series

www.lorextechnology.com



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(par exemple : à partir du Royaume-Uni, composez le 00 au lieu de +)

BEFORE YOU START

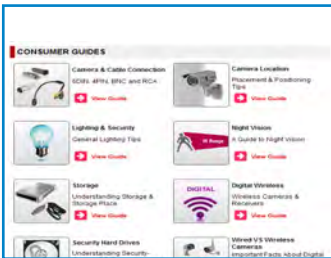
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THIS PRODUCT MAY REQUIRE PROFESSIONAL INSTALLATION

LOREX IS COMMITTED TO FULFILLING YOUR SECURITY NEEDS



- We have developed user friendly products and documentation. Please read the Quick Start Guide and User Manual before you install this product.



- Consumer Guides and Video Tutorials are available on our web site at www.lorextechnology.com/support



- If you require further installation assistance, please visit www.lorextechnology.com/installation or contact a professional installer.



- Please note that once the components of this product have been unsealed, you cannot return this product directly to the store without the original packaging.



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- Nous avons conçu et développé une documentation et des produits extrêmement conviviaux. Veuillez lire le Guide de départ rapide et le Guide d'utilisation avant d'installer ce produit.
- Des guides pour consommateurs et des tutoriels vidéo vous sont offerts sur notre site Web : www.lorextechnology.com/support
- Si vous avez besoin de plus d'assistance pour l'installation de ce produit, veuillez visiter le site www.lorextechnology.com/installation ou communiquez avec un installateur professionnel.
- Veuillez prendre note que lorsque vous avez déballé les pièces et composantes de ce produit, vous ne pouvez pas retourner celui-ci directement au magasin sans son emballage original.



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- Favor de leer la guía de instalación rápida y la guía del usuario antes de instalar este producto.
- Puede conseguir las guías del consumidor y los cursos en enseñanza video sobre el Internet visitando www.lorextechnology.com/support
- Si necesita ayuda para la instalación, visite www.lorextechnology.com/installation o contacte un especialista en instalaciones.
- Favor de notar que una vez que los componentes de este producto han sido removidos del embalaje, no podrá devolver este producto directamente a la tienda.

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VIEW YOUR WORLD™
VOIR VOTRE MONDE™
VEA SU MUNDO™

VANTAGE

Welcome!

Thank you for purchasing this Lorex wireless network camera. This user's guide refers to the following models:

- LNC101
- LNC104

Contents

Before you start, make sure you have the contents listed below.

- 1 x Camera
- 1 x Camera power adapter and USB power cable
- 1 x Ethernet cable
- 1 x Mounting kit
- 1 x Quick Start Guide
- 1 x Software/documentation CD

Safety Instructions

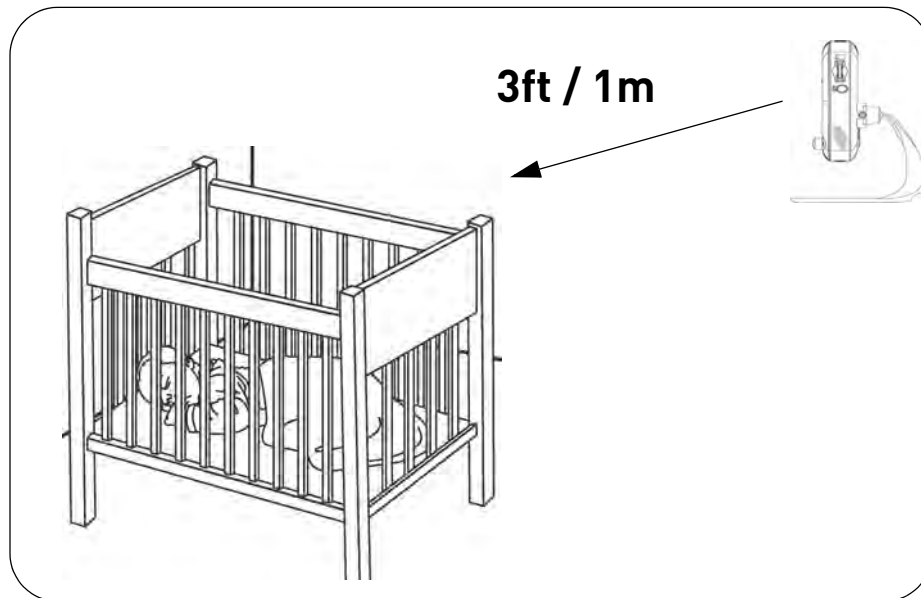
- Read this guide carefully and keep it for future reference.
- **Camera is rated for indoor use only.**
- Do not use in wet or humid areas.
- Use the camera within given temperature, humidity, and voltage levels noted in the Technical Specifications.
- Do not use the camera near a heat source, such as a radiator.
- Do not point the camera directly towards the sun or a source of intense light.
- Do not disassemble the camera.
- Periodic cleaning may be required. Use a damp cloth only. Do not use harsh cleaners or aerosol cleaners.
- Do not cover the camera with a towel or blanket.
- Keep all power and network cables out of reach of children.
- Use only the included power adapter or USB power adapters rated for 1A or higher.

If using this product as a baby monitor:

We advise you to take the following precautions to avoid possible injury to infants:

- **DO NOT** place the camera too close to cribs, bassinets, play yards, and other safe sleep environments for infants.
- **MAKE SURE** to run all power adapter cords and network cables where they are unlikely to be tripped over and are out of arms reach of your infant. Keep them at least **3ft / 1m** away.
- **MAKE SURE** the camera is on a stable footing so it cannot be easily knocked over.

NOTE: These precautions are important even if your infant is not yet standing or mobile



Features

- iOS, Android, PC and Mac compatible¹
- Wi-Fi & wired internet connectivity²
- Easy connection to Wi-Fi networks with WPS³
- Night vision up to 30ft with single high-power IR LED⁴
- microSD recording & playback supported⁵
- Dual motion detection: PIR & video
- Sound activated alerts
- Push notification of events & email alerts with snap shot attachment
- Bandwidth-efficient VGA (640x480) resolution
- H.264 video compression
- Supports up to 20 simultaneous users
- Two-way audio supported⁶
- Flexible indoor mounting (counter, wall, ceiling)

As our product is subject to continuous improvement, Lorex Technology & subsidiaries reserve the right to modify product design, specifications & prices without notice and without incurring any obligation.

-
1. Up to 4 simultaneous camera views available on PC, Mac, and tablets. Selectable single camera viewing on smartphones.
 2. Connection speed may vary depending on internet bandwidth.
 3. Compatible with WPS enabled routers (not included).
 4. Infrared illumination range under ideal conditions. Actual range and clarity may vary depending on scene/object reflection and camera application.
 5. microSD Card not included (supports up to 32GB).
 6. External speaker required, not included.

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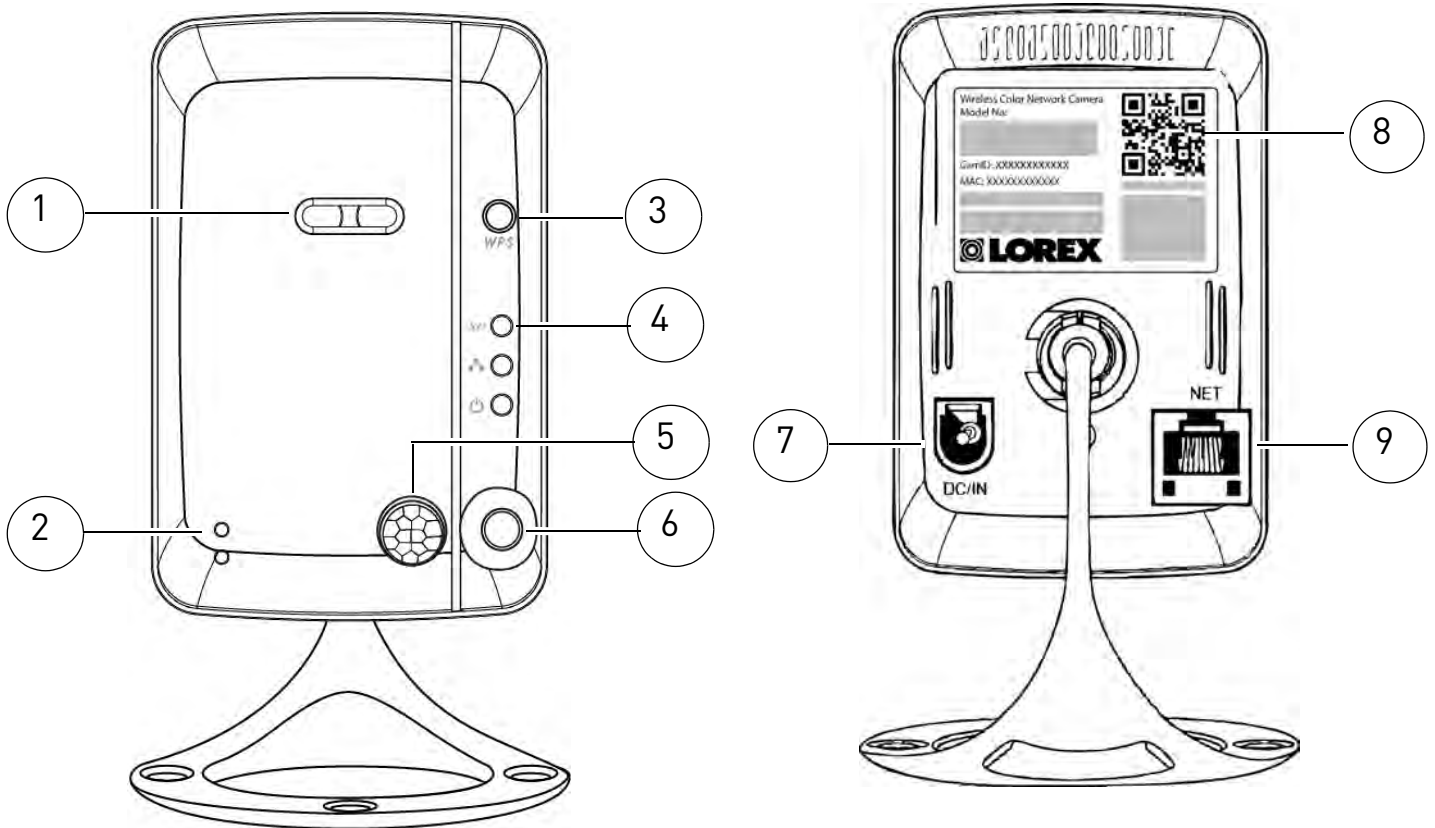
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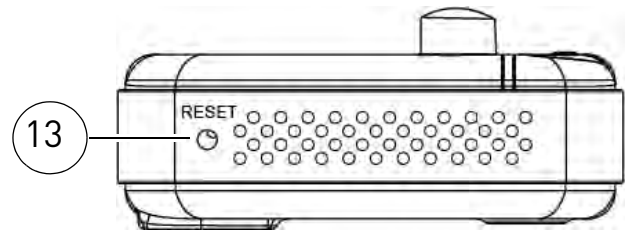
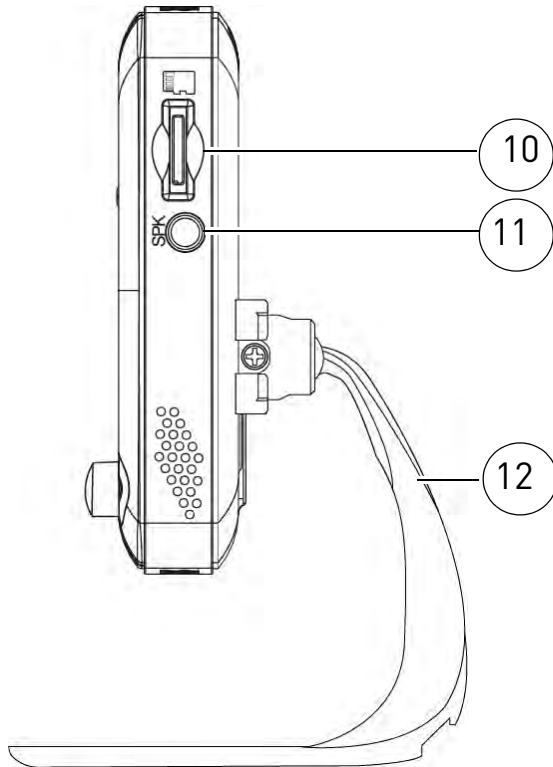
1. CAMERA OVERVIEW



English

1. **Camera Lens:** The camera has separate lenses for day/night use.
2. **Microphone**
3. **WPS Button:** Used to connect the camera to a wireless router (not included) with a WPS button.
4. **Indicator Lights:**
 - **SD:** Glows when a microSD card (not included) is inserted. Flashes during recording.
 - **📶 / Network:** Glows when connected to an ethernet or WiFi network. Flashes when sending or receiving data.
 - **🔌 / Status:** Glows when camera is connected to the Internet. Flashes when there is a connection problem.
5. **PIR Motion Sensor:** Allows the camera to detect motion by tracking body heat.
6. **Infrared LED:** Allows the camera to see in the dark.
7. **DC/IN:** Connect the included power adapter.

8. **CamID Label:** Shows the camera's CamID number and a QR code for easy setup using mobile devices.
9. **NET:** Connect an Ethernet cable and connect the other end to your router (not included).



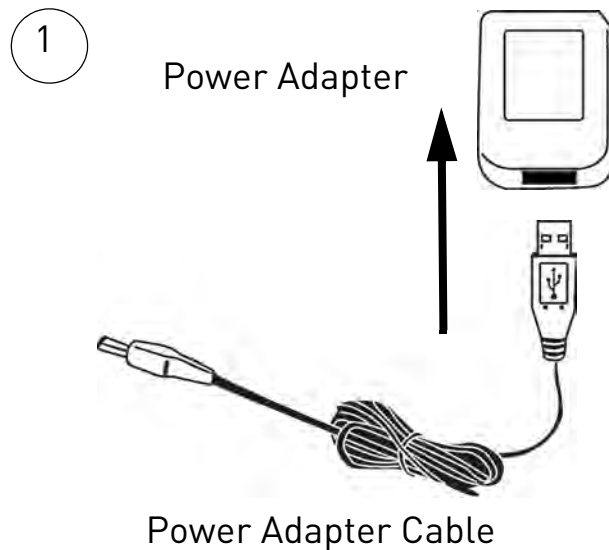
Bottom of camera

10. **MicroSD Card Slot:** Insert a microSD card (not included) to enable recording on the camera. Camera supports microSD cards up to a maximum size of 32GB.
11. **Audio Out:** Connect to an external speaker (not included) using a 3.5mm headphone jack to enable 2-way audio and alarms.
12. **Mounting Stand:** For mounting instructions, see "Wall or Ceiling Mounting" on page 158.
13. **Reset Button:** While the camera is powered on, press with a pin or small object for at least 4 seconds to reset the camera to factory defaults. This is useful if you have forgotten the password for the camera.

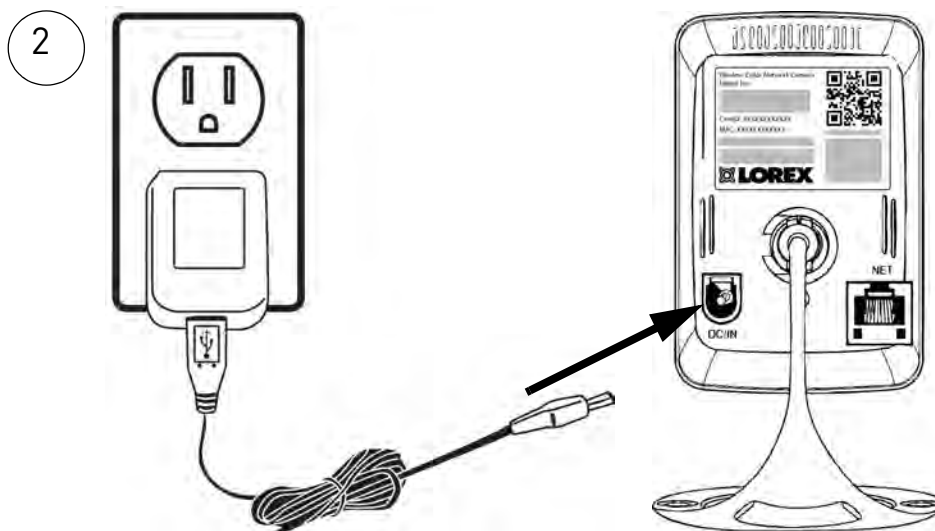
2. GETTING STARTED

2.1 BASIC SETUP

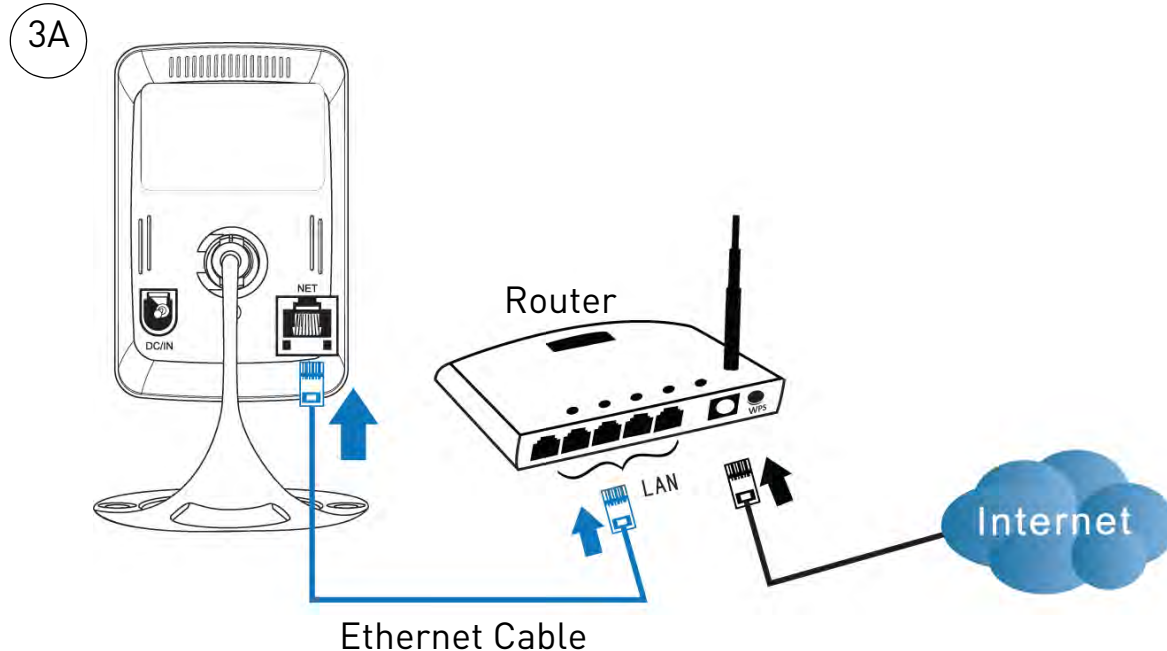
1. Connect the power adapter cable to the power adapter using the USB connector.



2. Connect the power adapter to a surge protector or power outlet. Connect the power adapter cable to the **DC/IN** port on the camera. The camera LED's will begin flashing.



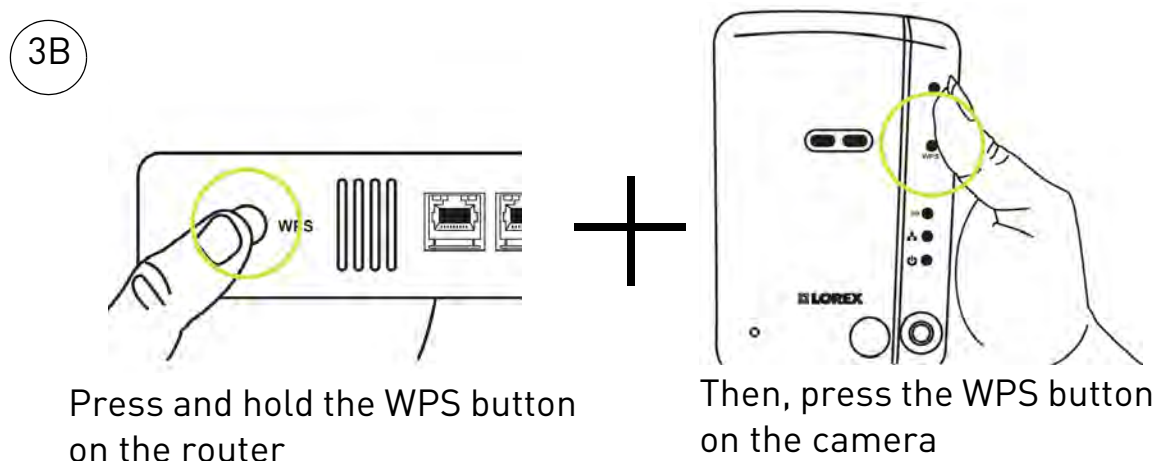
3. **A:** Connect an Ethernet cable (included) to the **NET** port on the camera and connect the other end to an available LAN port (usually numbered 1~4) on your router (not included). The blue Network LED on the camera will glow blue when the camera is connected to your network.



- For instructions on setting your camera up for WiFi, see “WiFi Setup” on page 21.

• **OR:**

B: OPTIONAL: If your router supports WPS, press and hold the **WPS** button on your router until the WPS light turns on. Then, press the **WPS** button on the camera within 1 minute. The camera will automatically connect to your WiFi network and the blue Network LED on the camera will turn on.



NOTE: Not all routers support WPS, and the location of the WPS button on your router depends on your router model. Check your router’s instruction manual for details.

2.2 CONNECTING TO YOUR CAMERA

Once your camera is connected to your wired or wireless network, you can connect to your camera using your PC, Mac, iPhone, iPad, or Android phone or tablet.

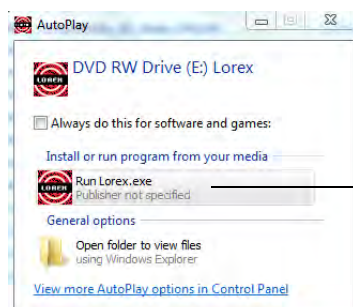
2.2.1 CONNECTING TO YOUR CAMERA ON PC

To connect to your cameras using a PC, you must install the L-View software provided on the CD or as a free download at www.lorextechnology.com. The steps to connect to cameras differ if you are connecting to a camera on a local network (i.e. your computer is connected to the same router as the camera) or over the Internet.

NOTE: For PC system requirements, see “System Requirements” on page 28.

Installing L-View (PC)

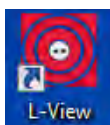
1. Insert the CD into your computer. The Autorun screen will appear. Click **Run Lorex.exe**.



Run Lorex.exe

2. Click **Software**, then **L-View for PC** to begin the installation. Follow the on-screen instructions to install the software.

Connecting to your Camera on the Local Network (PC)



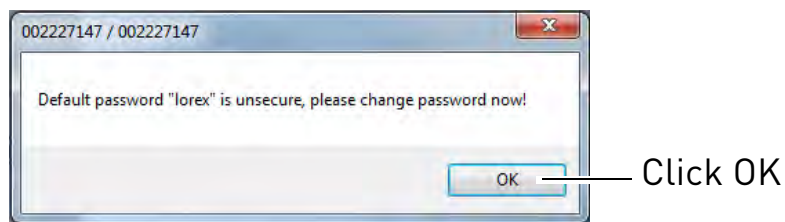
1. Double-click the L-View icon to run L-View. L-View opens and scans the local network for connected cameras. Connected cameras are shown under Auto Search.

Getting Started

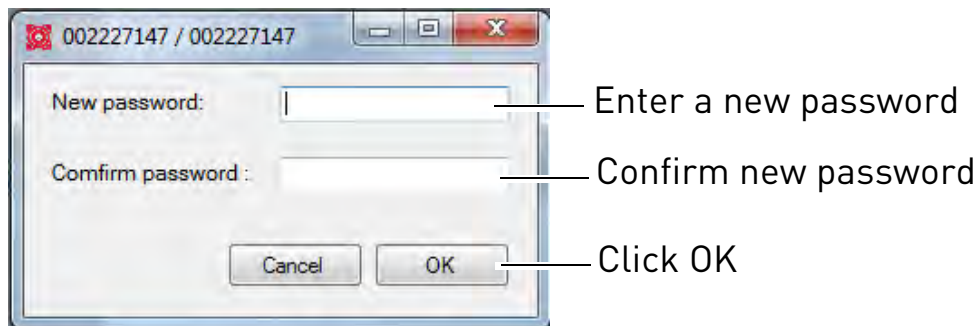
2. Double-click the camera under Auto Search or click and drag the camera to a desired screen on the display grid to connect to the camera.



3. Enter the camera password. If this is the first time connecting to the camera, the password is **lorex**. Click **OK**.
4. If you have connected to this camera before, L-View connects to the camera. If this is the first time connecting to the camera, L-View will prompt you to create your own password for the camera. Click **OK**.

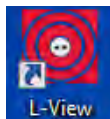


- Under **New Password**, enter a password that will be used for the camera. Under **Confirm Password**, enter the password again. Click **OK**.

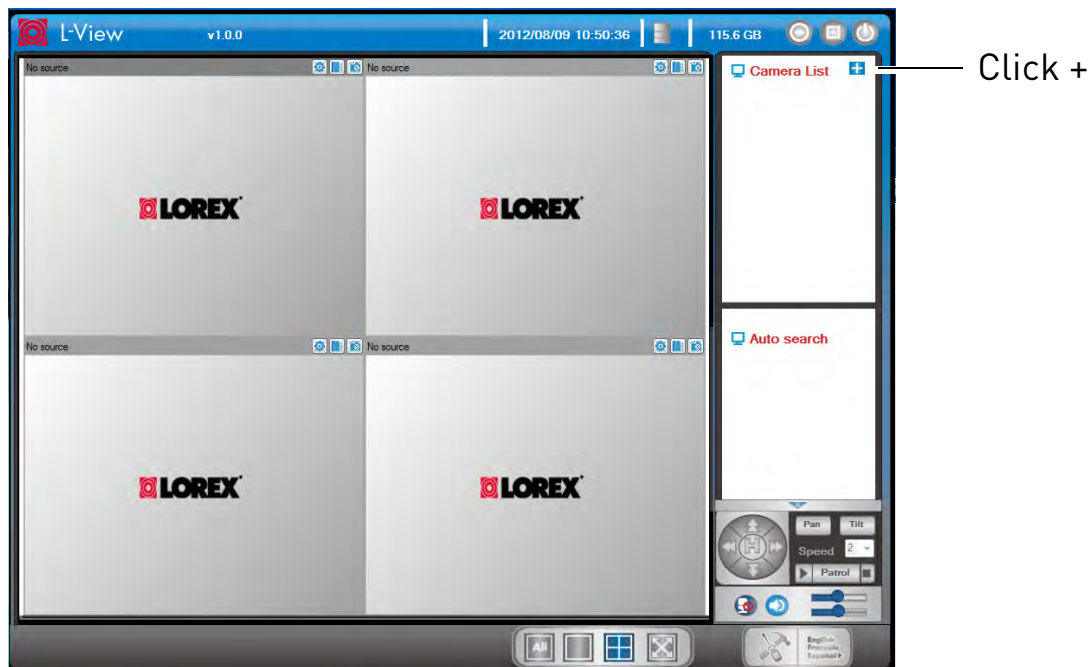


- Double-click the camera again under Auto Search to connect. Enter the new password for the camera then click **OK** to connect. L-View connects to the camera. If you would like to save the camera password in L-View, see “Saving Camera Passwords” on page 34.

Connecting to a Camera Over the Internet (PC)

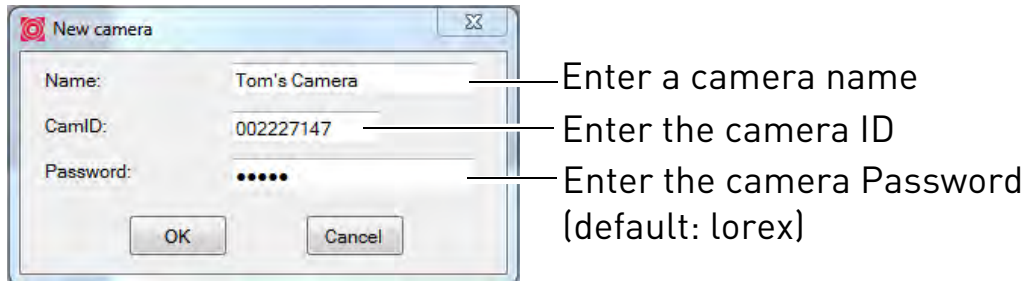


- Double-click the L-View icon to run L-View.
- Click **+** next to Camera List.

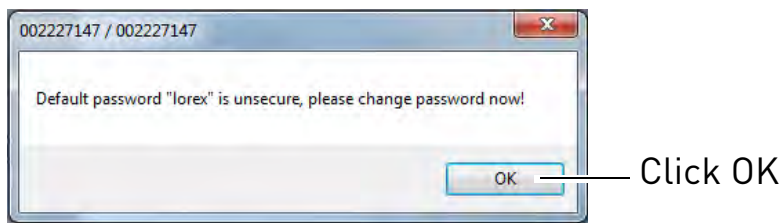


- Under **Name**, enter a camera name of your choice.
- Under **CamID**, enter the Cam ID number printed on the camera.

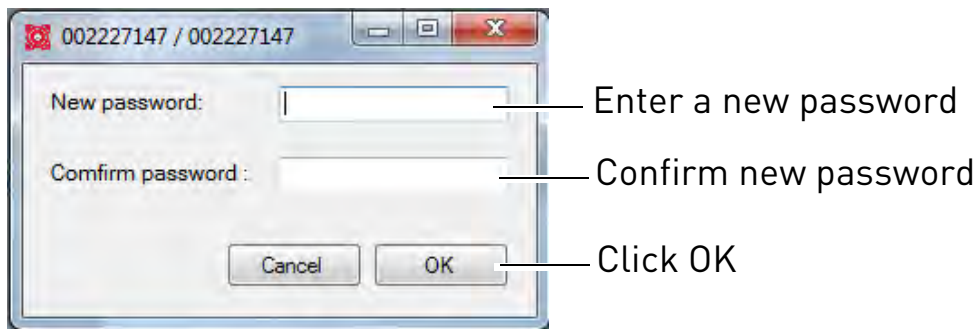
5. Under **Password**, enter the camera password. If this is the first time connecting to the camera, the password is **lorex**. Click **OK**.



6. Double-click the camera or drag the camera to a display screen to connect to the camera.
7. If you have connected to this camera before, L-View connects to the camera. If this is the first time connecting to the camera, L-View will prompt you to create your own password for the camera. Click **OK**.



8. Under **New Password**, enter a password that will be used for the camera. Under **Confirm Password**, enter the password again. Click **OK**.



9. Double-click the camera again under Camera List to connect. For detailed instructions on using L-View, see “L-View 104 for PC” on page 28.

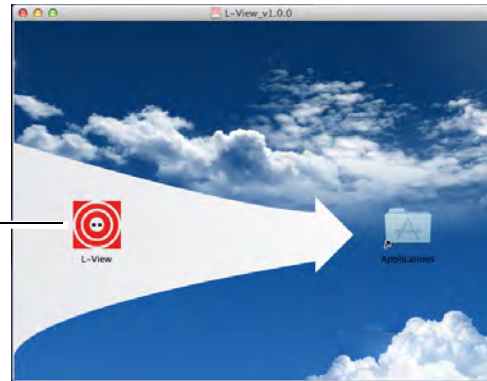
2.2.2 CONNECTING TO YOUR CAMERA ON A MAC

NOTE: For Mac system requirements, see “System Requirements” on page 54.

1. Install the L-View software from the CD or download it from www.lorextechnology.com.

2. Extract the installer file and double-click it to run.
3. Click and drag the L-View icon to **Applications** to install.

Click and drag L-View
to Applications

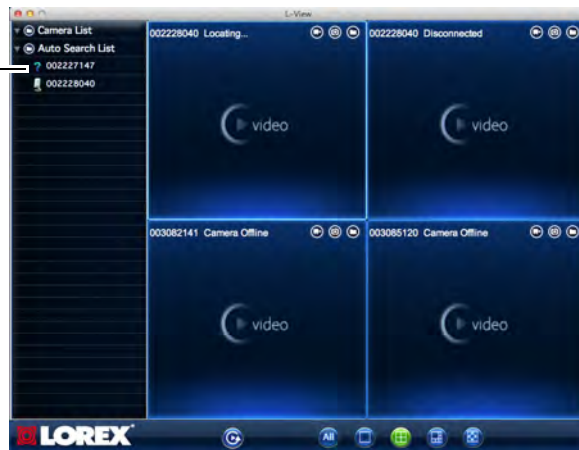


Connecting to your Camera on the Local Network (Mac)

NOTE: Your computer must be on the same network as the camera to perform the steps below.

1. Open L-View () from your Applications list. L-View scans for cameras on your local network.
2. Double-click the camera ID.

Double-click
the camera ID

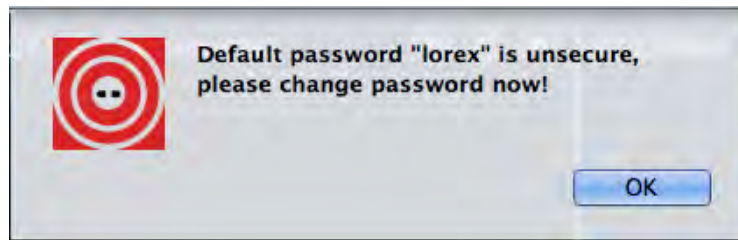


3. Enter the password (default: **lorex**) and then click **OK** to connect. L-View connects to your camera and streams live video.



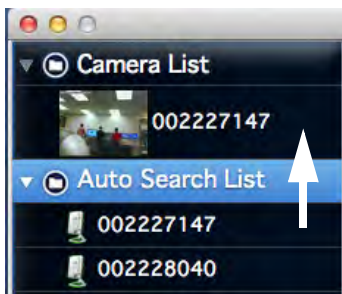
Enter the password (default: **lorex**)
and then click OK

- If this is the first time connecting to the camera, you are prompted to change your password. Click **OK**.

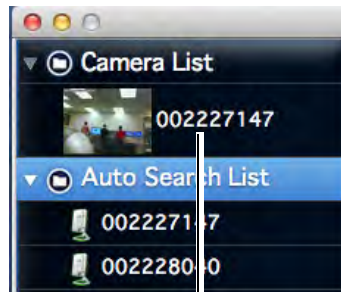


- Enter a new password and click **OK**.
- Double-click the camera ID under Auto Search again, enter the new password, and click **OK**. L-View connects to your camera and streams live video.

TIP: To save the camera password in L-View, click and drag the ID from the Auto Search List to the Camera List. Then, right-click the ID and click **ID/Password settings**. Enter the camera password. If you want, you can also enter a Camera Name of your choice for your camera. Click **OK**.



Click and drag camera ID from Auto Search List to Camera List



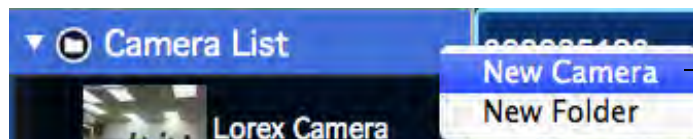
Right-click and select ID/Password settings



Enter a name of your choice. Enter the camera password and click OK

Connecting to your Camera over the Internet (Mac)

1. Right-click **Camera List** and then click **New camera**.



Right-click Camera List and click New Camera

2. Under **Camera Name**, enter a name for your camera of your choice.
3. Under **Camera ID**, enter the CamID number printed on the label on the back of your camera.
4. Under **Password**, enter the camera password (default: **lorex**) and then click **OK**.



Enter a name of your choice

Enter the camID on the camera label

Enter the camera password (default: lorex) and click OK

5. Double-click the camera to open it in L-View.



Double-click the camera

6. If this is the first time connecting to the camera, you are prompted to change your password. Click **OK**.

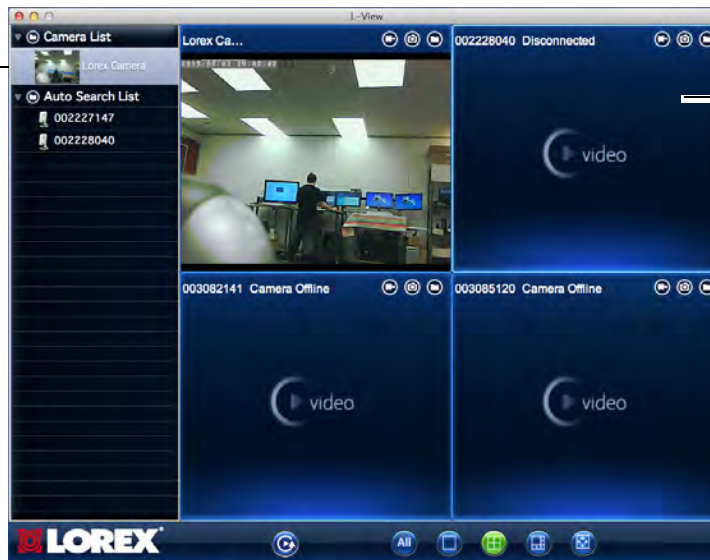


7. Enter a new password and click **OK**. L-View connects to your camera and streams live video. For more details on using L-View for Mac, see "iPhone App" on page 68.

NOTE: To connect to multiple cameras, click to select a display area. The area becomes

highlighted. Then, double-click the camera to open it in the selected area.

Then, double-click
a camera to open it



Click to select a
display area

2.2.3 CONNECTING TO YOUR CAMERA ON IPHONE

The app for iPhone is called **Lorex Ping iPhone**.

To connect to your camera using an iPhone:

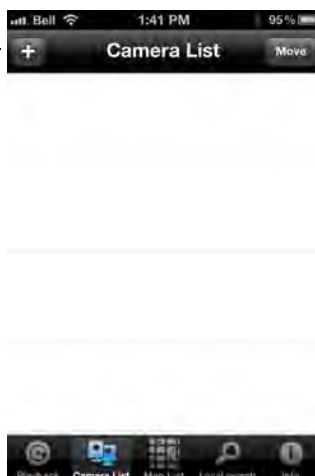
1. Download **Lorex Ping iPhone** from the App Store.

NOTE: Lorex Ping is a free application, but it requires a valid iTunes account to download. Lorex Ping requires iOS v4.0 and higher.

2. Tap the Lorex Ping icon () from the home screen to open Lorex Ping. Lorex Ping opens to the Camera List.

3. Tap **+** to add a camera.

Tap + —



4. Under **Name**, enter a name for your camera. This can be anything of your choice.

Enter a name for your camera of your choice

5. Under **ID**, press the QR code button () and line up the QR code printed on the back of the camera using the camera on the phone. The CamID will automatically be entered.

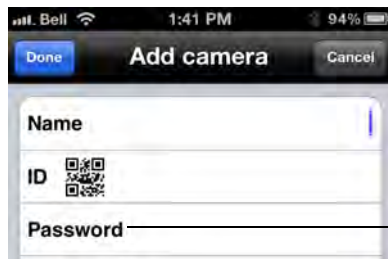
Press to scan the QR code printed on the back of the camera, OR manually enter the CamID printed on the camera



Line up the QR code to the middle using the phone camera

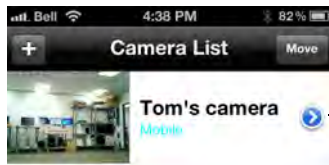
- **OR:** Manually enter the **CamID** printed on the camera.

- Under **Password**, enter the camera password. If this is the first time connecting to the camera, enter **lorex**. Press **Done**.



Enter the camera password. The default password is lorex.

- Tap the name of the camera in the Camera List to connect to the camera. Lorex Ping connects to the camera.



Tap the name of the camera to connect



- If this is the first time connecting to the camera, you will be prompted to create your own password. Tap **OK**.



Tap OK

- Under New password, enter a new password for the camera and repeat the password under Confirm password. Tap **OK**.



Enter a new password, confirm your password, and then tap OK

- Tap the name of the camera in Camera List again to connect to the camera. For details on using the iPhone app, see "iPhone App" on page 68.

2.2.4 CONNECTING TO YOUR CAMERA ON IPAD

The app for iPad is called **Lorex Ping HD**.

To connect to your camera using iPad:

1. Download the **Lorex Ping HD** app from the App Store.

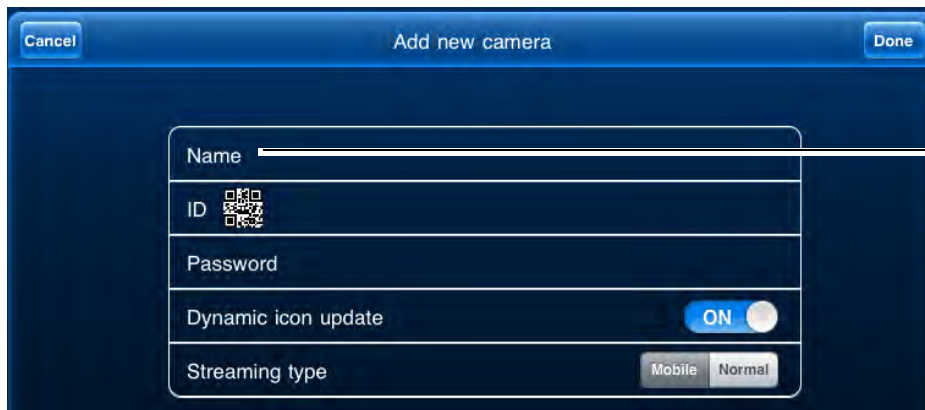
NOTE: Lorex Ping is a free application, but it requires a valid iTunes account to download. Lorex Ping requires iOS v4.0 and higher.

2. Tap the Lorex Ping icon () from the home screen to open Lorex Ping. Lorex Ping opens to the Camera List.
3. Tap **+** to add a camera.

Tap +

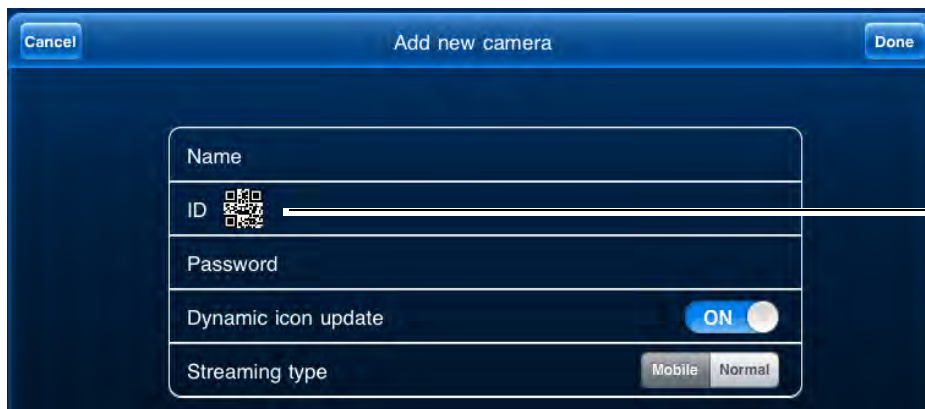


4. Under **Name**, enter a name for your camera. This can be anything of your choice.



Enter a name for your camera of your choice

5. Under **ID**, press the QR code button () and line up the QR code printed on the back of the camera using the camera on the iPad. The CamID will automatically be entered.



Press to scan the QR code printed on the back of the camera, OR manually enter the CamID printed on the camera



Line up the QR code to the middle using the iPad camera

- **OR:** Manually enter the **CamID** printed on the camera.

NOTE: QR code setup is not compatible with 1st generation iPads. If you have a 1st generation iPad, manually enter the CamID printed on the camera into ID.

6. Under **Password**, enter the camera password. If this is the first time connecting to the camera, enter **lorex**. Press **Done**.

Enter the camera password. The default password is lorex.

7. Tap the name of the camera in the Camera List to connect to the camera. Lorex Ping connects to the camera.

Tap the name of the camera to connect

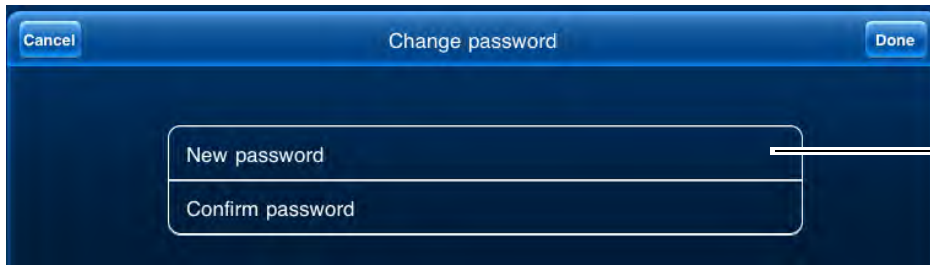


8. If this is the first time connecting to the camera, you will be prompted to create your own password. Tap **OK**.



Tap OK

- Under **New password**, enter a new password for the camera and repeat the password under **Confirm password**. Tap **Done**.



Enter a new password, confirm your password, and then tap Done

- Tap the name of the camera in Camera List again to connect to the camera. For details on using the iPad app, see “iPad App” on page 90.

2.2.5 CONNECTING TO YOUR CAMERA ON ANDROID

The app for Android is called **Lorex Ping**.

To connect to your camera using Android:

- Download the **Lorex Ping** app from the Google Play store.

NOTE: Lorex Ping requires Android v.2.3 or higher.

- Tap the Lorex Ping icon () from the home screen or app list to open Lorex Ping. Lorex Ping opens to the Camera List.
- Tap **+** to add a camera.

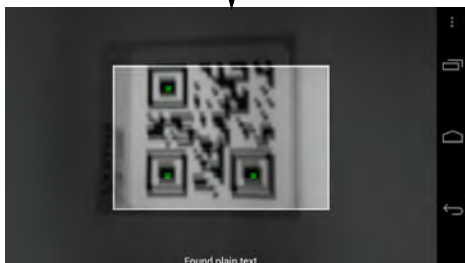


4. Under **Camera Name**, enter a name for your camera. This can be anything of your choice.

Enter a name for your camera of your choice

5. Under **ID**, press the QR code button (QR code icon) and line up the QR code printed on the back of the camera using the camera on the Android phone or tablet. The CamID will automatically be entered.

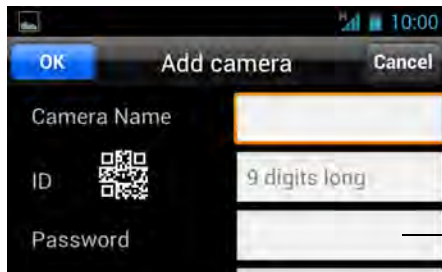
Press to scan the QR code printed on the back of the camera, OR manually enter the CamID printed on the camera



Line up the QR code to the middle using the camera on the phone or tablet

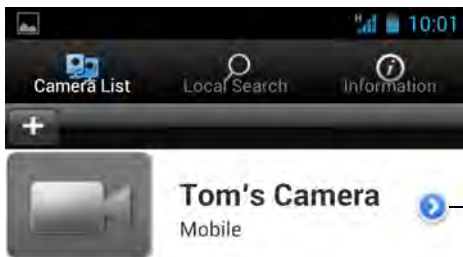
- **OR:** Manually enter the CamID printed on the camera.

- Under **Password**, enter the camera password. If this is the first time connecting to the camera, enter **lorex**. Press **OK**.



Enter the camera password. The default password is lorex.

- Tap the name of the camera in the Camera List to connect to the camera. Lorex Ping connects to the camera.



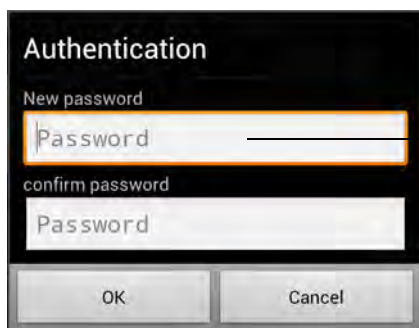
Tap the name of the camera to connect

- If this is the first time connecting to the camera, you will be prompted to create your own password. Tap **OK**.



Tap OK

- Under **New password**, enter a new password for the camera and repeat the password under **Confirm password**. Tap **OK**.



Enter a new password, confirm your password, and then tap OK

- Tap the name of the camera in Camera List again to connect to the camera. For details on using the Android app, see "Android App" on page 112.

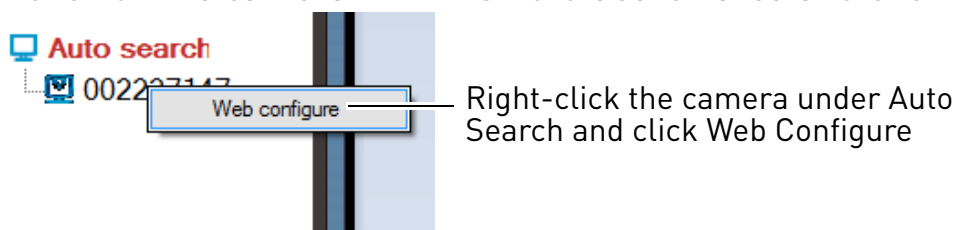
2.3 WIFI SETUP

You can setup the camera to use WiFi using your PC, Mac, iPhone, iPad, or Android phone or tablet. You can also quickly connect the camera to a WiFi network using WPS (WPS compatible router required; see step 3B on page 4 for instructions).

2.3.1 PC/MAC WIFI SETUP

NOTE: The camera must be connected to your router using an Ethernet cable before you can set it up to use WiFi.

1. Install L-View on a PC or Mac in your local network (must be connected to the same router as the camera) and connect to the camera. For details, see “Connecting to your Camera on PC” on page 5, or see “Connecting to your Camera on a Mac” on page 8.
2. Right-click on the camera ID in the Auto Search area and click **Web Configure**.

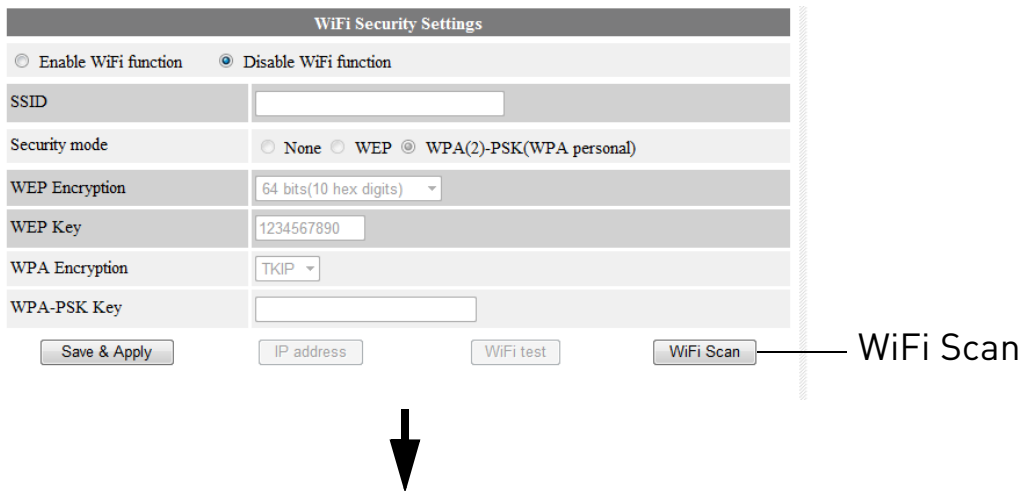


3. Enter the camera admin user name and password. By default, the admin user name is **admin** and the admin password field is **left blank**. Click **Log in**. The Web Configure interface opens in your default web browser.

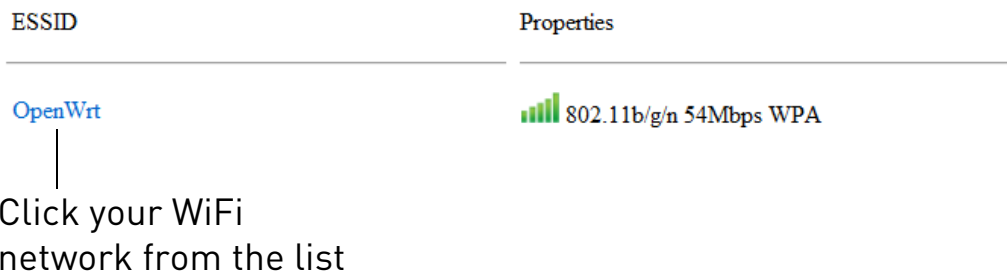
NOTE: Your camera admin user name and password differs from the password used to connect to your camera to view video.

4. Click on **Network** and then **WiFi Security**.

5. Click **WiFi Scan** and select your WiFi network from the list.

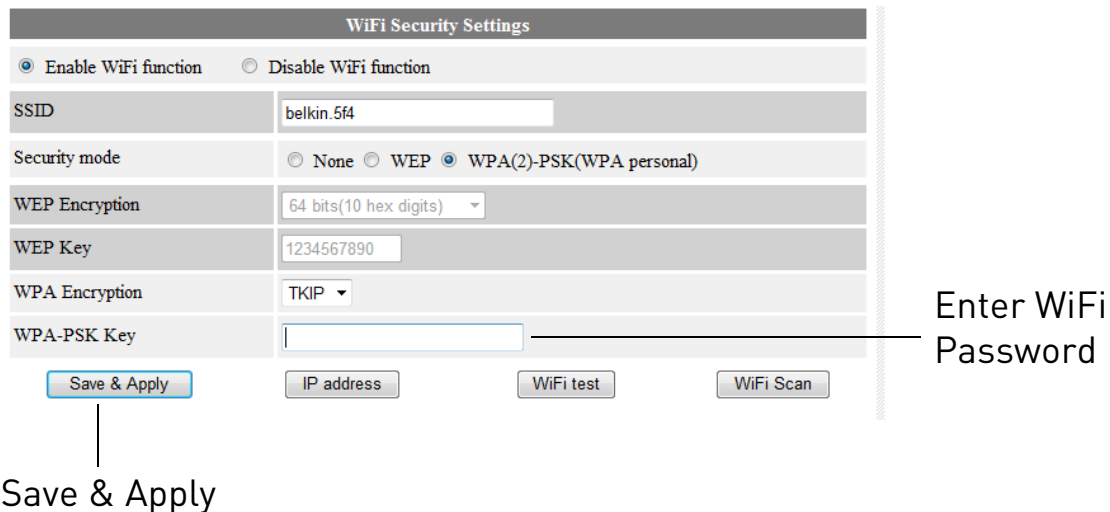


The screenshot shows the 'WiFi Security Settings' page. At the top, there are two radio buttons: 'Enable WiFi function' (unselected) and 'Disable WiFi function' (selected). Below this are several input fields: 'SSID' (empty), 'Security mode' (radio buttons for 'None', 'WEP', and 'WPA(2)-PSK(WPA personal)' with 'WPA(2)-PSK(WPA personal)' selected), 'WEP Encryption' (dropdown menu showing '64 bits(10 hex digits)'), 'WEP Key' (text box with '1234567890'), 'WPA Encryption' (dropdown menu showing 'TKIP'), and 'WPA-PSK Key' (empty text box). At the bottom, there are four buttons: 'Save & Apply', 'IP address', 'WiFi test', and 'WiFi Scan'. A line points from the text 'WiFi Scan' to the 'WiFi Scan' button. A large black arrow points downwards from the 'WiFi Scan' button to the next screenshot.



The screenshot shows a network selection screen. On the left, under the heading 'ESSID', there is a link 'OpenWrt'. On the right, under the heading 'Properties', there is a signal strength indicator (four bars) followed by the text '802.11b/g/n 54Mbps WPA'. A line points from the text 'Click your WiFi network from the list' to the 'OpenWrt' link.

6. Under **WPA-PSK Key** or **WEP Key**, enter the WiFi password. Click **Save and Apply**.



The screenshot shows the 'WiFi Security Settings' page. At the top, there are two radio buttons: 'Enable WiFi function' (selected) and 'Disable WiFi function' (unselected). Below this are several input fields: 'SSID' (text box with 'belkin.5f4'), 'Security mode' (radio buttons for 'None', 'WEP', and 'WPA(2)-PSK(WPA personal)' with 'WPA(2)-PSK(WPA personal)' selected), 'WEP Encryption' (dropdown menu showing '64 bits(10 hex digits)'), 'WEP Key' (text box with '1234567890'), 'WPA Encryption' (dropdown menu showing 'TKIP'), and 'WPA-PSK Key' (empty text box). At the bottom, there are four buttons: 'Save & Apply', 'IP address', 'WiFi test', and 'WiFi Scan'. A line points from the text 'Enter WiFi Password' to the 'WPA-PSK Key' text box. Another line points from the text 'Save & Apply' to the 'Save & Apply' button.

7. Click **WiFi Security** again and click **WiFi Test** (this may take up to 60 seconds).

WiFi test



WiFi testing status

Status test success !

If testing failed, please check the settings.

OK

8. When successful, **Status** will say **Test Success**. If unsuccessful, double check your wireless password and make sure your camera is close enough to the wireless router to get a good signal.
9. Remove the Ethernet cable from the camera wait 60 seconds and then reconnect to your camera in L-View.

2.3.2 IPHONE WIFI SETUP

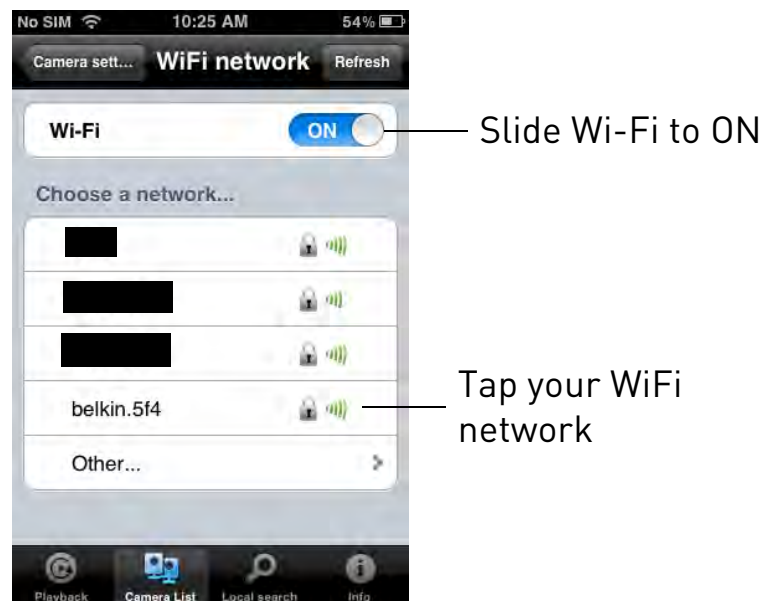
NOTE: The camera must be connected to your router using an Ethernet cable before you can set it up to use WiFi.

1. Connect to your camera using Lorex Ping iPhone. For details, see "Connecting to your Camera on iPad" on page 15. **Your iPhone must be connected to your WiFi, not your 3G/mobile network.**
2. Tap  to open the edit camera screen.

3. Tap **Camera Settings**. Enter the camera's admin username and password. By default, the admin username is **admin** and the password is **left blank**. Tap **OK**.



4. Tap **Network** then **WiFi Network**.
5. Slide Wi-Fi to **ON**. The camera scans for available networks in range.
6. Tap the name of your WiFi network, enter the password, and tap **OK**.



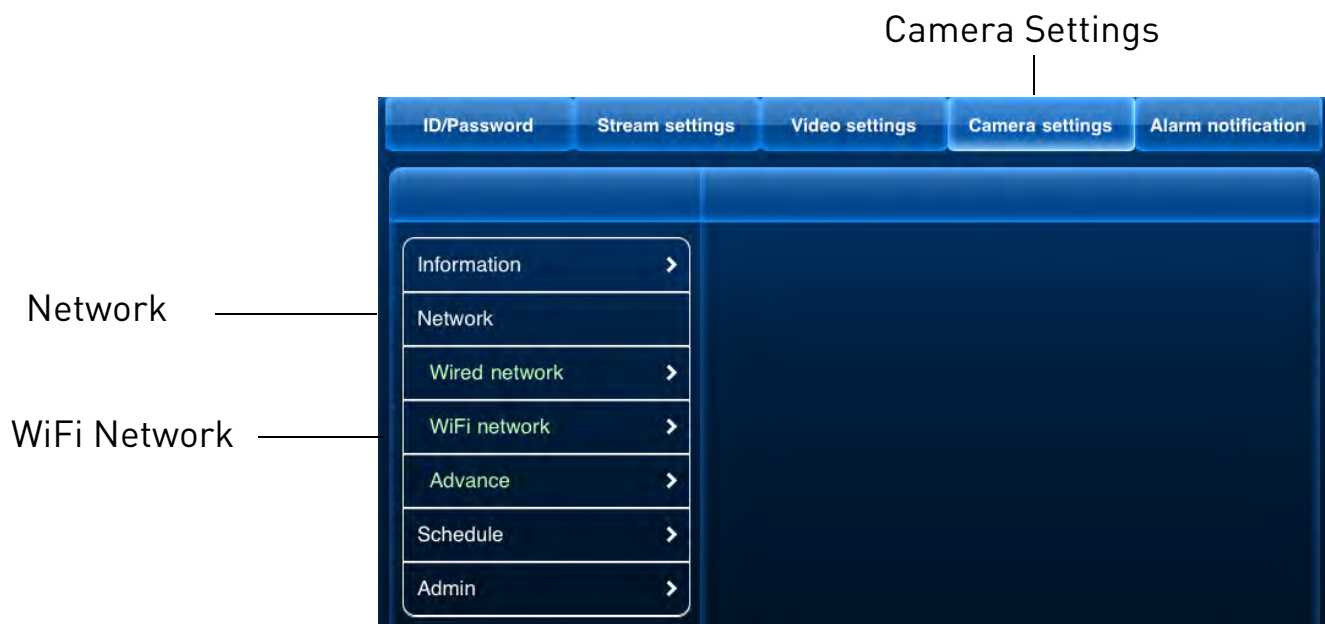
7. Wait for the update to complete.
8. Remove the Ethernet cable from the camera. It will connect to the wireless network. When it is connected, the blue Network LED will be on or flashing.
9. Press **Camera Settings**, **ID/Password**, and then **Back** to exit the edit camera screen.

10. Tap the camera in the Camera List to connect. If you cannot connect, check to make sure you have entered the correct wireless password and that the camera is in signal range of your wireless router.

2.3.3 IPAD WIFI SETUP

NOTE: The camera must be connected to your router using an Ethernet cable before you can set it up to use WiFi.

1. Connect to your camera using Lorex Ping HD. For details, see “Connecting to your Camera on iPad” on page 15. **Your iPad must be connected to your WiFi, not your 3G/mobile network.**
2. Press  to open the edit camera screen.
3. Tap **Camera Settings**. Enter the camera’s admin username and password. By default, the admin username is **admin** and the password is **left blank**. Tap **OK**.
4. Tap **Network** then **WiFi Network**.



5. Slide **Wi-Fi** to **ON**. The camera will scan for available networks.

6. Tap the name of your WiFi network, enter the password, and tap **OK**. Wait for the update to complete.



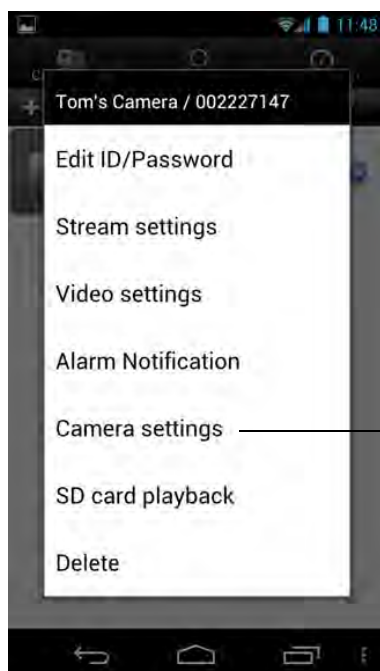
7. Remove the Ethernet cable from the camera. It will connect to the wireless network. When it is connected, the blue Network LED will be on or flashing.
8. Press  next to the camera name to exit the edit camera screen.
9. Tap the camera in the Camera List to connect. If you cannot connect, check to make sure you have entered the correct wireless password and that the camera is in signal range of your wireless router.

2.3.4 ANDROID WIFI SETUP

NOTE: The camera must be connected to your router using an Ethernet cable before you can set it up to use WiFi.

1. Connect to your camera using Lorex Ping. For details, see “Connecting to your Camera on Android” on page 18. **Your phone or tablet must be connected to your WiFi, not your 3G/mobile network.**
2. Tap  to open the edit camera screen.

3. Tap **Camera Settings**. Enter the admin username and password. By default, the admin username is **admin** and the password is **left blank**. Tap **OK**.



Tap Camera Settings

4. Tap **Network** then **WiFi Network**.
5. Check the **WiFi** checkbox. The camera will scan for available networks.



Check WiFi

Tap the name of your WiFi network

6. Tap the name of your WiFi network, enter the password, then tap **OK**. Wait for the update to complete.
7. Remove the Ethernet cable from the camera. It will connect to the WiFi network. When it is connected, the blue Network LED will be on or flashing.
8. Press **Camera Settings** then **Camera List** to exit the edit camera screen.
9. Tap the camera in the Camera List to connect. If you cannot connect, check to make sure you have entered the correct wireless password and that the camera is in signal range of your wireless router.

3. L-VIEW 104 FOR PC

L-View is a PC client software that supports up to 4 cameras. L-View is provided on the CD or available as a free download from www.lorextechnology.com.

For instructions on installing and connecting to your camera using L-View, see “Connecting to your Camera on PC” on page 5.

NOTE: For Mac software instructions, see “iPhone App” on page 68.

3.1 SYSTEM REQUIREMENTS

Description	Minimum System Requirements
CPU	2.0 GHz (dual-core recommended)
Memory	2GB
Operating System	Windows XP SP 2 and higher Windows 7 Basic, Home Premium, Ultimate Windows 8
Hard Drive	Minimum 5~10 GB free for recordings and snapshots

3.2 L-VIEW FOR PC INTERFACE



English

1. **Display:** Shows live or recorded video from your camera(s).
 - Click to select a camera and scroll up/down to zoom in/out. When the camera is zoomed in, click and drag the camera image to pan the camera.
 - Double-click to open the display area in full-screen. Double-click again to exit full-screen.
 - Right-click to open the display sub-menu. See “Display Sub-Menu” on page 32.
2. **Image/Recording Controls:**
 -  **Video Settings:** Click to edit the camera’s video settings. See “Configuring Camera Video Settings” on page 43.

-  **microSD:** Click to open a list of recordings saved on the camera's microSD card (not included). See "Playing Back Recordings on the microSD card with L-View" on page 42.
 -  **Snapshot:** Click to save a still image screenshot of the camera. To access Snapshots, see "Directories (Opening or Changing the Snapshot Folder)" on page 49. Snapshots are saved in .png format.
 -  **Record:** Record video directly to your computer hard drive. For details, see "Recording to your Computer Hard Drive" on page 47.
3. **Time and Date:** Show the current time and date on the computer. Note that the camera time and date may differ. For instructions on setting the time and date on the camera, see "Date/Time" on page 152.
4. **Minimize/Restore**
5. **Maximize/Revert to Window**
6. **Exit**
7. **Camera List:** Shows list of saved cameras. Available cameras are in blue. Cameras in red are not available. If a camera appears in red, check the network connection. For more details, see "Camera List (Managing Cameras)" on page 33.
- NOTE:** Cameras may appear in red before you have connected to them the first time.
8. **Auto Search:** Auto Search shows cameras located on your local network (LAN).
- Double-click the camera name or click and drag the camera to the display area to view the camera.
 - Drag the camera to the Camera List to save the camera.
 - Right-click the camera ID and select Web Configure to configure the camera settings using a browser. See "Configuring Camera Settings using a Web Browser" on page 134.
9. **Pan/Tilt/Zoom Controls:** Controls for compatible PTZ cameras (not included).
10. **Volume Controls:**
- Click  to activate 2-way-audio (intercom) feature and click again to deactivate 2-way-audio. Camera speaker required (not included). Note that turning on 2-way-audio will mute audio from the camera.
 - Click  to mute audio from the camera. Click again to unmute audio from the camera.

- Use the top volume slider to control the volume for the camera speaker (not included) when the 2-way-audio is activated.
- Use the bottom volume slider to control the volume of audio coming from the camera.

11.L-View Controls:

-  **L-View Settings:** Click to open settings for L-View. See “Configuring L-View” on page 49.
-  **L-Play:** Click to open L-Play to view video files saved on your computer hard drive. See “L-Play: Playing back Video from your PC’s Hard Drive” on page 39.
-  **Language Selector:** Click to select the language for L-View.

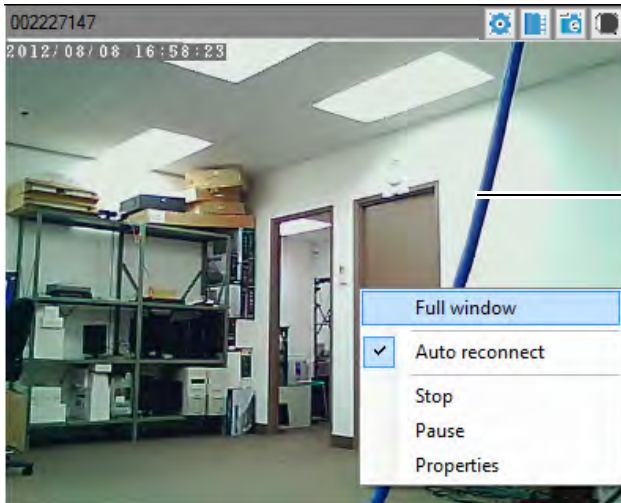
12.  **All Camera Action:** Click to perform an action on all cameras.

13.  **Split-Screen Selectors:** Click  to select single camera view or  to select 4-camera view.

14.  **Full Screen:** Click to open the camera display area in full-screen. Press **ESC** to exit full-screen.

3.2.1 DISPLAY SUB-MENU

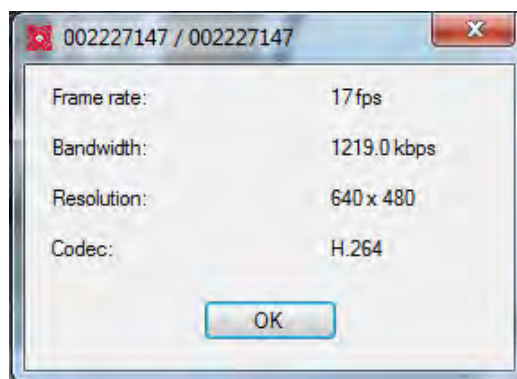
The Display sub-menu opens when you right-click on a camera's display area. It contains additional camera controls.



Right-click on a camera in the display area to open the Display sub-menu

The Display sub-menu contains the following controls:

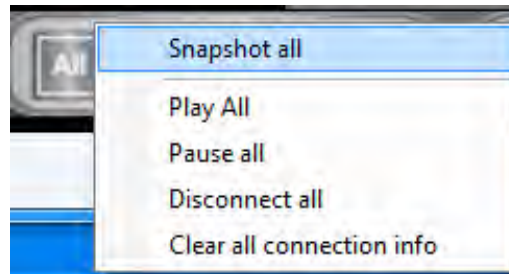
- **Full window:** Open the camera in single camera view.
- **Auto reconnect:** L-View will attempt to reconnect to the camera if it becomes disconnected.
- **Stop:** Disconnect from the camera.
- **Pause:** Pause the video. Click again to un-pause the video.
- **Properties:** Click to view video properties.



Video Properties

3.2.2 ALL CAMERA ACTION

Press  to open the All Camera Action menu.



The All Camera Action Menu contains the following controls:

- **Snapshot all:** Take a snapshot from all connected cameras.
- **Play all:** Connect to all cameras selected in display grid.
- **Pause all:** Pause video for all connected cameras. Click **Pause all** again to resume video.
- **Disconnect all:** Disconnect from all connected cameras.
- **Clear all connection info:** Remove all cameras from the display grid.

3.3 CAMERA LIST (MANAGING CAMERAS)

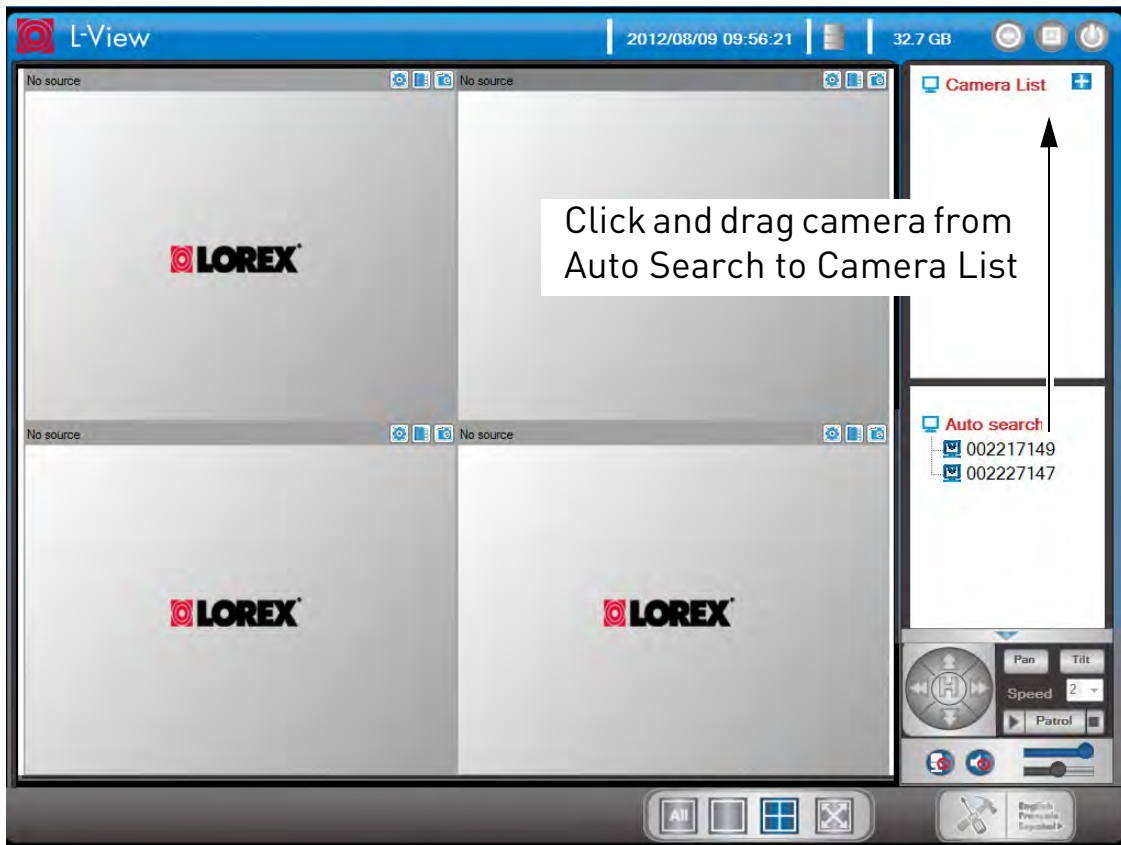
The Camera List is used to save connection information for your cameras, so you don't have to re-enter the ID or password each time you connect. The Camera List also allows you to configure certain camera settings.

Cameras connected to the Internet or local network are shown in blue in the camera list. Cameras not connected are shown in red. If your camera is red, check the network connection.

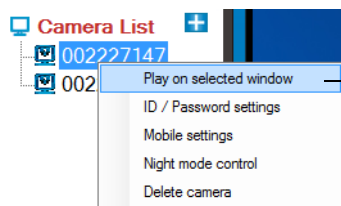
NOTE: Cameras may appear in red before you have connected to them the first time.

3.3.1 ADDING CAMERAS TO CAMERA LIST

- If the camera is on the local network, click and drag a camera from the Auto Search list to Camera List to add it.



- If the camera is not on the local network (i.e. you are connecting to it over the Internet), see "Connecting to a Camera Over the Internet (PC)" on page 7 to add the camera to the Camera List.
- Right-click on your camera to open the Camera List sub-menu. See below for instructions.



Right-click to open the Camera List sub-menu

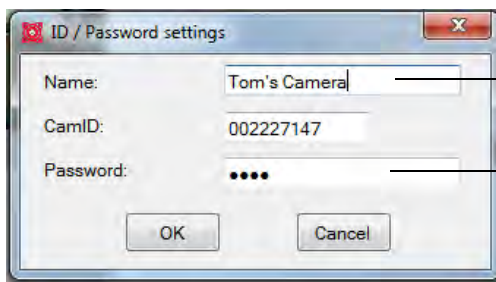
3.3.2 SAVING CAMERA PASSWORDS

You can use the Camera List sub-menu to save the camera's password in L-View, so you don't have to enter the password to connect to the camera.

NOTE: To change the camera's password, see "Video Settings" on page 139.

To save the camera password:

1. Right-click on the camera in Camera List and click **ID/Password settings**.
2. Under **Name**, enter a name for the camera that will appear in Camera List. This can be anything of your choice.
3. Under **Password**, enter the camera password to save the password in L-View.



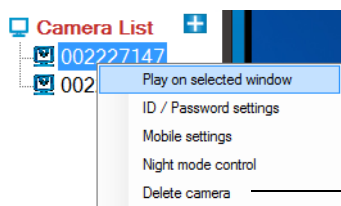
Enter a name
for your camera

Enter the password
to save it in L-View

4. Click **OK**.

3.3.3 DELETING CAMERAS

1. Right-click on the camera in Camera List and click **Delete Camera**.

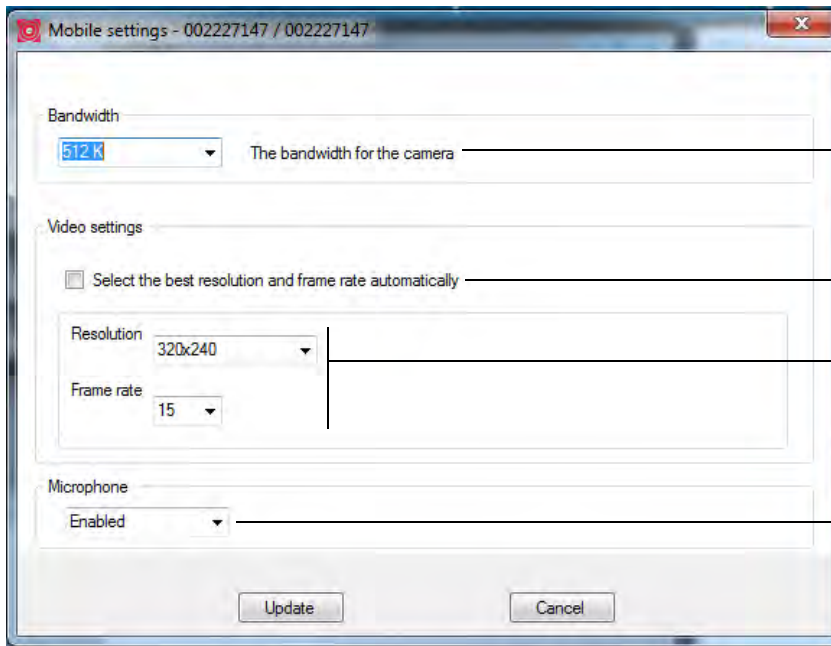


Right-click on the camera
and click Delete Camera

2. Click **Delete** to confirm.

3.3.4 CONFIGURING MOBILE STREAMING SETTINGS

Configure streaming settings when connecting using a smartphone or tablet.



Select Bandwidth

Check to automatically adjust resolution and frame rate based on bandwidth available

Select Resolution and Frame Rate for mobile streaming

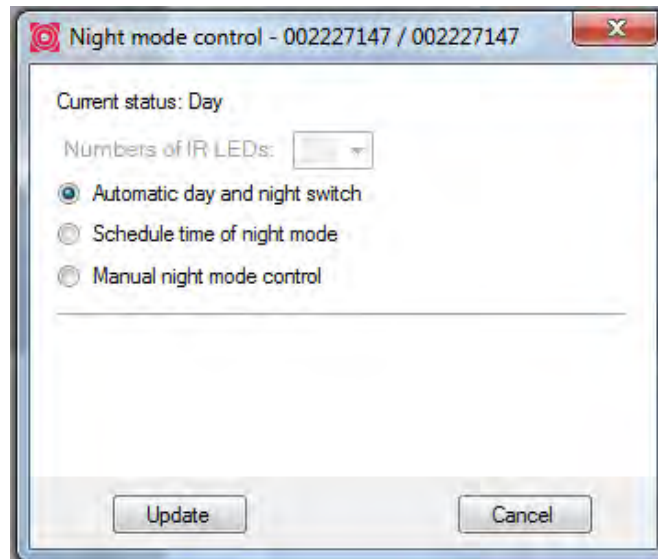
Enable or disable audio streaming to mobile device

To configure mobile streaming settings:

1. Right-click on the camera you want to configure and click **Mobile settings**.
2. Under **Bandwidth**, select your available mobile bandwidth. If you are primarily connecting using WiFi, you may set this setting higher.
3. Check **Select resolution and frame rate automatically** to have the camera automatically select the resolution and frame rate based on available bandwidth. If you leave this unchecked, configure the following:
 - Under **Resolution**, select the resolution that will be used when connecting to the camera using a smart phone or tablet: **640x480** (VGA), **320x240** (QVGA), or **160x120** (QQVGA).
 - Under **Frame rate**, select the frame rate that will be used when connecting to the camera using a smart phone or tablet between **30fps** (highest) and **1fps** (lowest).
4. Under **Microphone**, select **Enable** to enable audio streaming to smart phones and tablets or **Disable** to disable audio streaming to smart phones and tablets.
5. Click **Update** to apply changes to your camera. Enter the admin username (default: **admin**) and password (default: **left blank**) for the camera and click **OK**.
6. The camera will disconnect when the setting is changed. Double-click the camera in Camera List to reconnect.

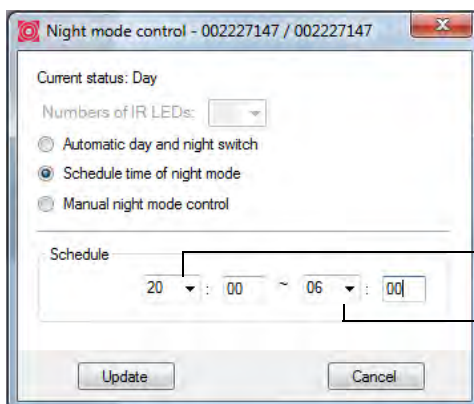
3.3.5 CONFIGURING NIGHT MODE CONTROL

Configure when the camera uses day or night mode. When day mode is on, the camera sees in color. When night mode is on, the camera sees in black and white, and the Infrared LED turns on to enable night vision.



To configure night mode settings:

1. Right-click on the camera you want to configure and select **Night mode control**.
2. Select one of the following:
 - **Automatic day and night mode switch:** Camera will automatically switch between day mode or night mode, based on the amount of light in the room.
 - **Scheduled time of night mode:** Camera will switch between day mode and night mode at a scheduled times each day. If using this option, use the first set of drop-down menus to select (in 24-hour time) the time the camera will switch to night mode and the second set of drop-down menus to select when the camera will return to day mode.

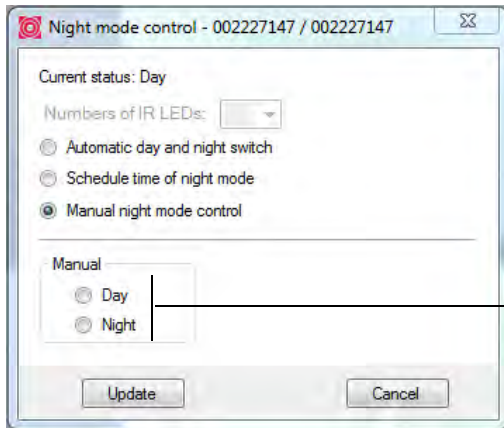


EXAMPLE

Start of night mode
(8:00 PM)

Return to day mode
(6:00 AM)

- **Manual night mode control:** Manually select day mode or night mode. If using this option, under Mode, select **Day** for day mode or **Night** for night mode.



Select day or night mode

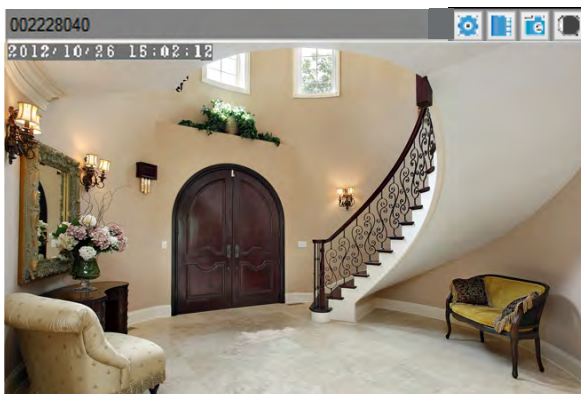
3. Click **Update** to apply changes to your camera. Enter the admin username (default: **admin**) and password (default: **left blank**) for the camera and click **OK**.
4. The camera will disconnect when the setting is changed. Double-click the camera in Camera List to reconnect.

3.4 RECORDING TO YOUR PC'S HARD DRIVE

You can manually record video to your computer hard drive.

To record to your computer's hard drive:

- Click  above the camera's video area to start recording. The recording icon will turn red (.
- Click  again to stop recording. To playback video on PC, see “L-Play: Playing back Video from your PC's Hard Drive” on page 39. For Mac, see “L-View for Mac” on page 62.



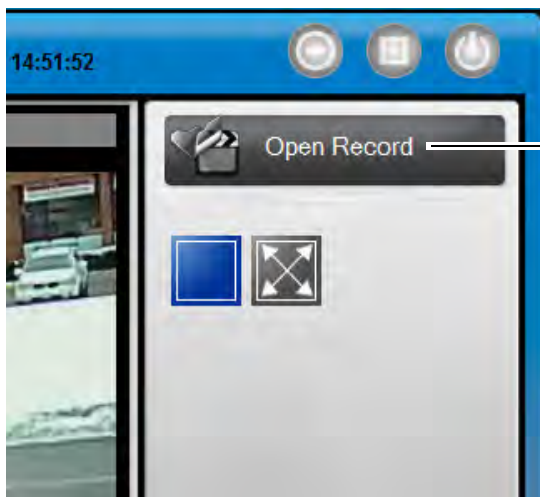
Start/stop recording

3.5 L-PLAY: PLAYING BACK VIDEO FROM YOUR PC'S HARD DRIVE

L-Play is used to playback video files saved to your computer's hard drive. L-Play is installed automatically when you install L-View.

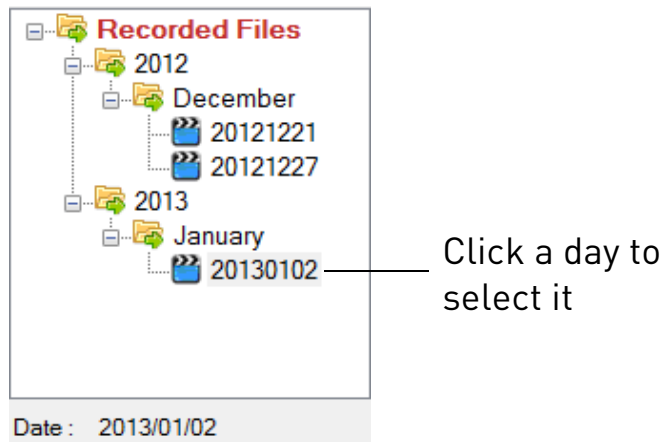
To playback video saved to your computer's hard drive:

1. Record some video using the steps above if you have not done so already.
2. Click the L-Play icon () to open L-Play.
3. Click **Open Record**.

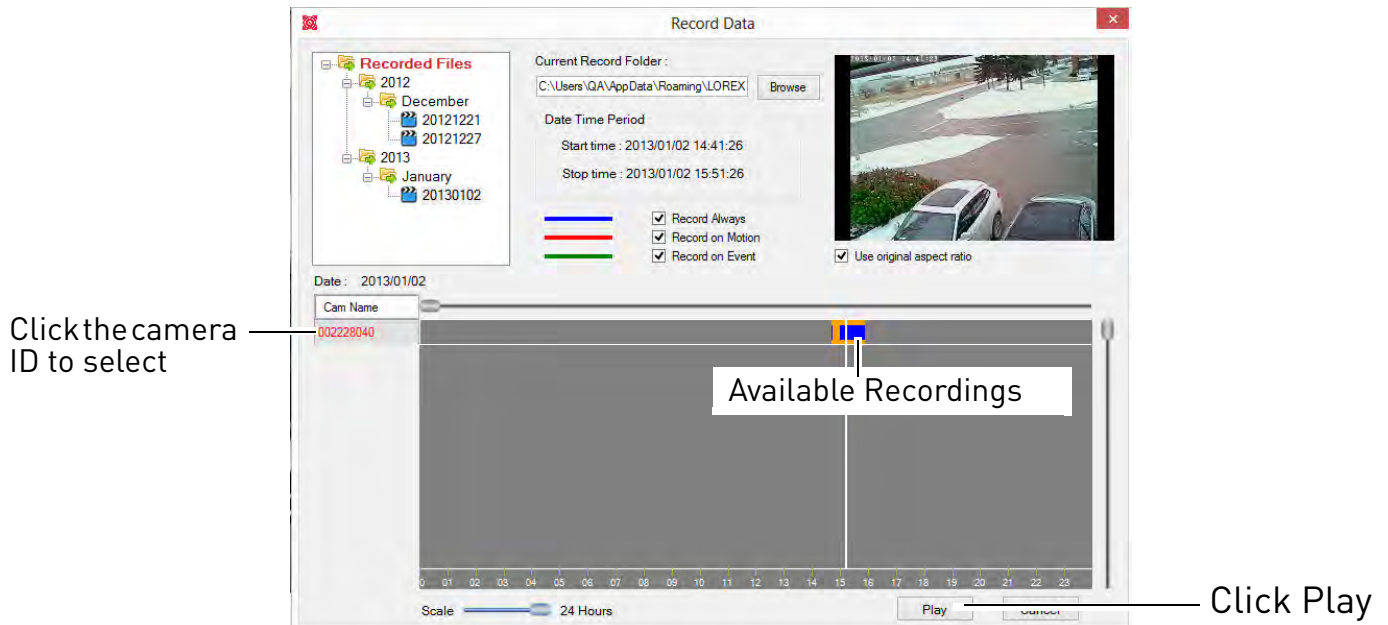


4. Use the Recorded Files area to find the day you would like to playback from.
 - Click + next to a year to expand recordings for the year.
 - Click + next to a month to expand recordings for that month.

- Click a day to select it.



5. Click the ID of the camera you would like to playback video from and then click **Play**.



6. Use the on-screen controls to control playback.

The screenshot shows the L-Play video player interface. The main video window displays a snowy street scene with two cars. The top status bar shows 'L-Play v1.0.3', the date '2013/01/02', and the time '14:51:52'. The video window itself shows a timestamp of '2013/01/02 14:41:23'. The right sidebar contains an 'Open Record' button, a search icon, and a full-screen button. The bottom control bar includes a language selector, play/pause/stop buttons, playback speed controls (1x, slow down, speed up), zoom in/out buttons, a volume slider, and a mute button. A seek bar is located below the video window.

Labels and their corresponding controls:

- Minimize
- Maximize
- Exit
- Search for video
- Open in full-screen
- Time video was recorded: 14:41:31
- Volume
- Mute
- NOTE: Once zoomed in, click and drag the mouse to pan the zoom area.
- Zoom in
- Zoom out
- Speed up playback
- Slow down playback
- Pause
- Play
- Stop
- Change language
- Seek to different time

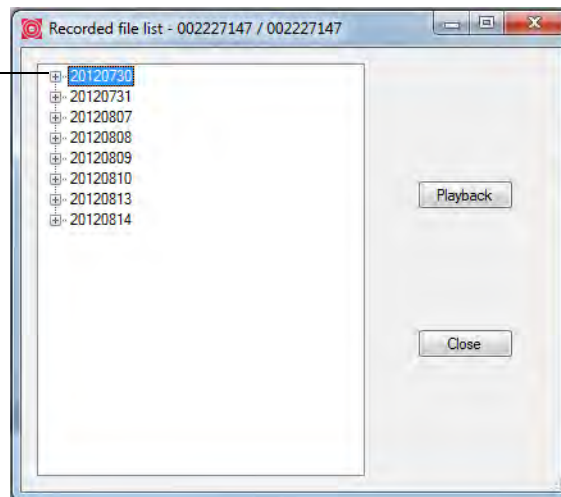
3.6 PLAYING BACK RECORDINGS ON THE MICROSD CARD WITH L-VIEW

You can use L-View to playback recorded video on the camera's microSD card (required; not included). For instructions on setting up recording on the microSD card, see "SD Card (Configuring microSD Recording)" on page 147.

To playback recorded video on the microSD card:

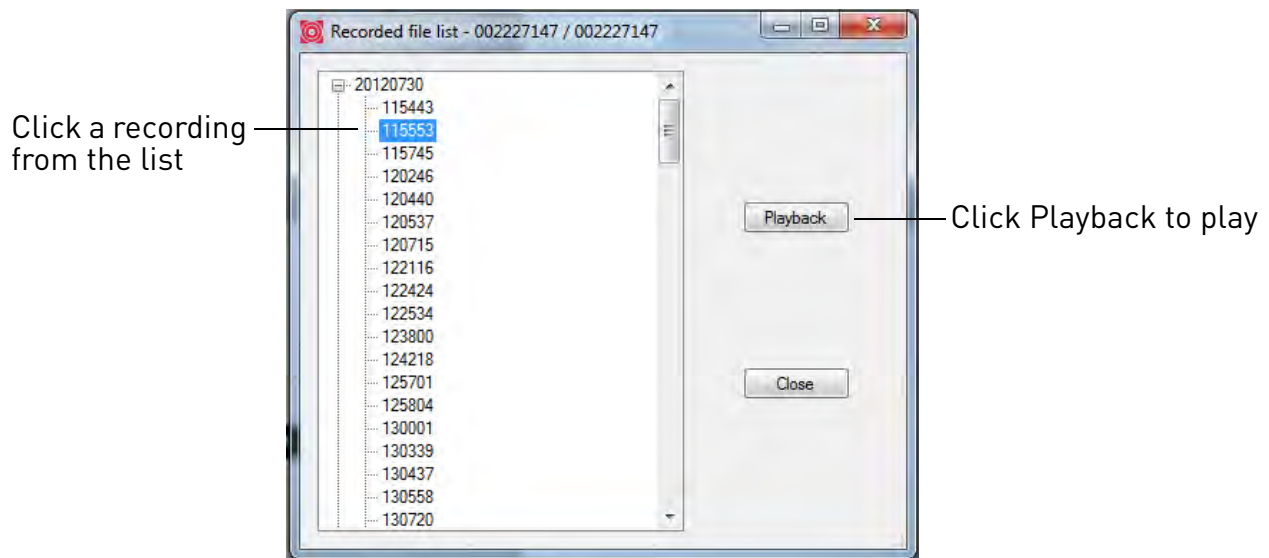
1. Connect to the camera you would like to playback recordings from.
2. Click the **microSD button** () on top of the camera display area. Enter the camera password if required.
3. A list is created of all days with recordings available in the format *yyyymmdd* (for example, *20120730* is *July 30, 2012*).

Click + to view recordings from a day—



4. Click the + next to a day to view recordings from that day. Recordings from that day are shown from earliest to latest. Recordings are named according to the time they were recorded with the format *hhmmss* (for example, *115553* is *11:55:53 AM*).

5. Click a recording from the list and then click **Playback** to view it.



6. The recording plays back in the camera display area.

- To return to a live view of your camera, wait for the recording to finish, then right-click and select **Play**.
- **OR**, while the recording is still playing, right-click in the display area and select **Stop** then right-click again and select **Play**.
-

3.7 CONFIGURING CAMERA VIDEO SETTINGS

The Video Settings menu allows you to adjust the quality of the camera video.

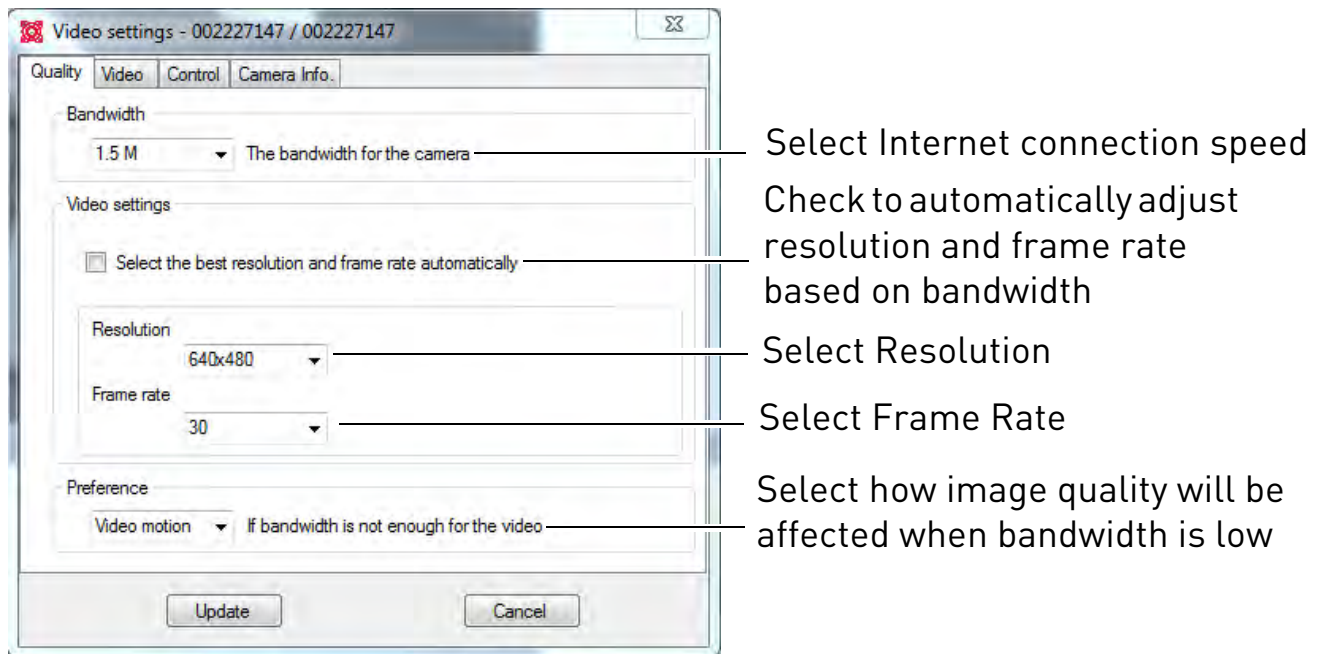
To open the Video Settings menu:

- Click  on the top of the display area for the camera you would like to configure.

NOTE: The camera will disconnect after making changes to video settings. Wait about 15 seconds after clicking Update and double-click the camera in Camera List or Auto Search to reconnect to the camera.

TIP: Change only one camera image quality setting at a time before clicking **Update** so you can judge the effects.

3.7.1 QUALITY TAB (CONFIGURING RESOLUTION, FRAME RATE, AND BANDWIDTH)



The Quality tab allows you to configure image quality settings such as the camera resolution, frame rate, and bandwidth settings.

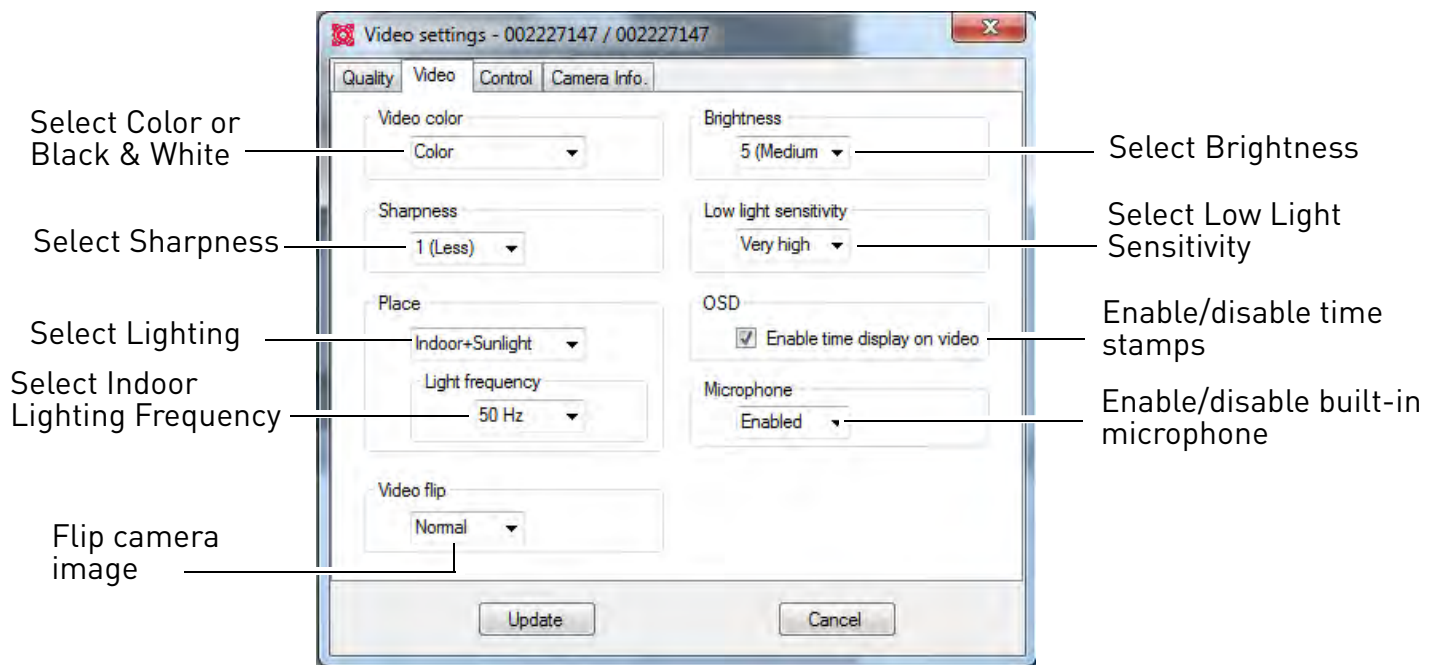
To configure image quality settings:

1. Under **Bandwidth**, select the speed of your Internet connection. If your Internet connection is faster than 1.5Mbps, select 1.5Mbps.
2. Check **Select the best resolution and frame rate automatically** to have the camera automatically adjust the resolution and frame rate based on bandwidth. Or, un-check it to manually configure the resolution and frame rate. If you are manually configuring the resolution and frame rate, configure the following:
 - **Resolution:** Manually select either **VGA** (640x480) or **QVGA** (320x240) resolution. VGA resolution will give you a better, more detailed picture, but requires more bandwidth. QVGA allows the camera to maintain a higher frame rate when available bandwidth is low.
 - **Frame rate:** Manually select the frame rate between **30fps** (highest) and **1fps** (lowest). 30fps is real time video, meaning that movement in the image will appear smooth, with no choppiness.
3. Under **Preference**, select your quality preference when bandwidth increases or decreases:

- Select **Video Motion** to have the camera maintain the frame rate and reduce image quality when bandwidth is insufficient.
 - Select **Image Quality** to have the camera maintain image quality and reduce frame rate when bandwidth is insufficient.
 - Select **Better Quality** to have the camera maintain frame rate and increase quality when bandwidth is sufficient.
 - Select **Best Quality** to have the camera maintain the frame rate and increase quality to the maximum speed of the connection.
4. Click **Update** to save changes. Enter the camera admin username (default: **admin**) and password (default: **left blank**) and click **OK**. The camera will disconnect. Wait about 15 seconds and then double-click the camera in Camera List or Auto Search to reconnect to the camera.

3.7.2 VIDEO TAB (CONFIGURE GENERAL VIDEO SETTINGS)

The Video tab allows you to configure general video settings, such as color and brightness settings.

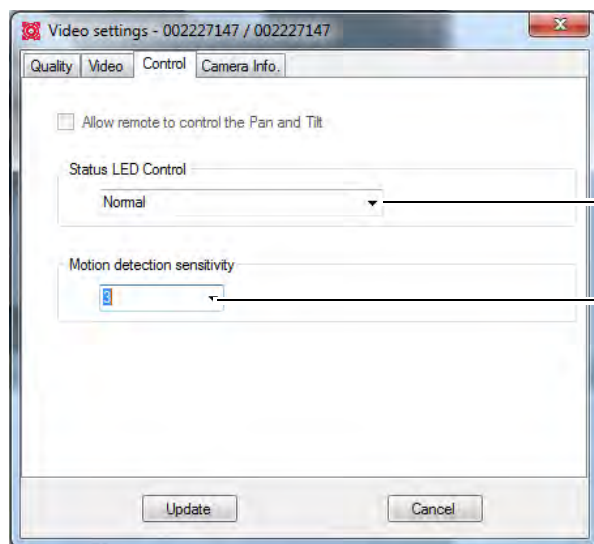


To configure general video settings:

1. Under **Video Color**, select **Color** or **Black & White**.
2. Under **Sharpness**, select the sharpness of the image between **10** (highest) and **1** (lowest).

3. Under **Place**, select **Outdoor video** if the area with the camera is brightly lit. Select **Indoor Video** if you notice strip lines in the image or if the picture is too dark on the Outdoor video setting. Select **Indoor video + Sunlight** if the picture is too bright on the Indoor Video setting.
 - If you select Indoor Video or Indoor Video + Sunlight, select **60Hz** or **50Hz** to adjust the camera for the frequency of your indoor lighting.
4. Under **Video Flip**, select **Video Flip** to flip the camera image vertically and horizontally or select **Normal** for normal orientation.
5. Under **Brightness**, select the brightness of the image between **10** (highest) and **1** (lowest).
6. Under **Low Light Sensitivity**, set the camera's sensitivity in low light environments between **Very High** (highest), **High**, and **Normal** (lowest).
7. Check **Enable time display on video** to turn on video time stamps or un-check it to disable video time stamps.
8. Under **Microphone**, select **Enabled** to enable the built-in microphone on the camera or select **Disabled** to disable the built-in microphone on the camera.
9. Click **Update** to save changes. Enter the camera admin username (default: **admin**) and password (default: **left blank**) and click **OK**. The camera will disconnect. Wait about 15 seconds and then double-click the camera in Camera List or Auto Search to reconnect to the camera.

3.7.3 CONTROL TAB (CONFIGURE STATUS LED'S AND MOTION DETECTION SENSITIVITY)



Configure status LED's

Configure motion detection sensitivity from 1 (High) to 10 (Low)

English

The Control tab allows you to configure the camera status LED's to make the camera harder to spot at night. It also allows you to configure the motion detection sensitivity when using video motion detection.

To configure the camera status LED's:

- Under **Status LED Control**, select one of the following:
 - **Normal:** LED's will function as normal. For details on LED functions, see "Camera Overview" on page 1.
 - **Always turn off:** LED's are turned off at all times.
 - **Turn off after connected:** LED's turn on when the camera is powered on and turn off once a network connection is made.
- Click **Update** to save changes. Enter the camera admin username (default: **admin**) and password (default: **left blank**) and click **OK**. The camera will disconnect. Wait about 15 seconds and then double-click the camera in Camera List or Auto Search to reconnect to the camera.

To configure motion detection sensitivity:

NOTE: The following method works when using video motion detection. It does not work when using PIR motion detection. For details on enabling motion detection and selecting video motion detection or PIR, see "Schedule" on page 144.

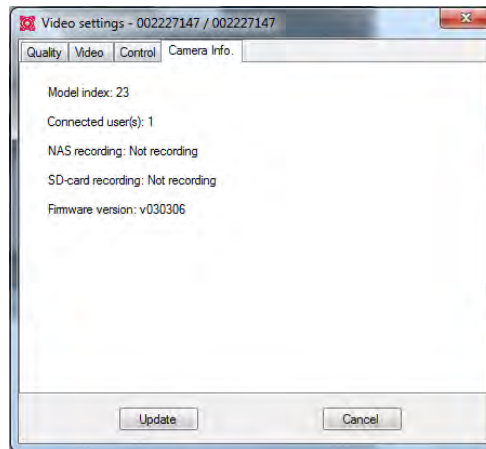
- Under **Motion Detection Sensitivity**, select the motion detection sensitivity between **1** (High) and **10** (Low). If Motion Detection Sensitivity is set to 1, motion detection will

be triggered if a moving object is larger than 1% of the video area. If it is set to 10, a moving object must be larger than 10% of the video area to trigger motion detection.

2. Click **Update** to save changes. Enter the camera admin User Name (default: **admin**) and Password (default: **left blank**) and click **OK**. The camera will disconnect. Wait about 15 seconds and then double-click the camera in Camera List or Auto Search to reconnect to the camera.

3.7.4 CAMERA INFO TAB

The camera info tab shows system information about the camera.

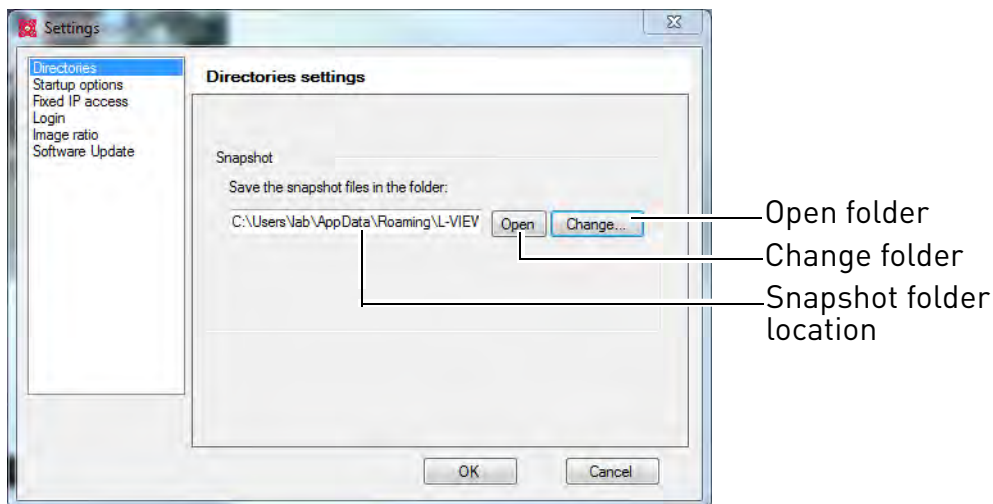


3.8 CONFIGURING L-VIEW

To configure settings for L-View, click the settings button ().

3.8.1 DIRECTORIES (OPENING OR CHANGING THE SNAPSHOT FOLDER)

The Directories menu shows you the folder where Snapshots are saved. It allows you to open or change the Snapshot folder.



To open the Snapshot folder:

- Click **Open**.

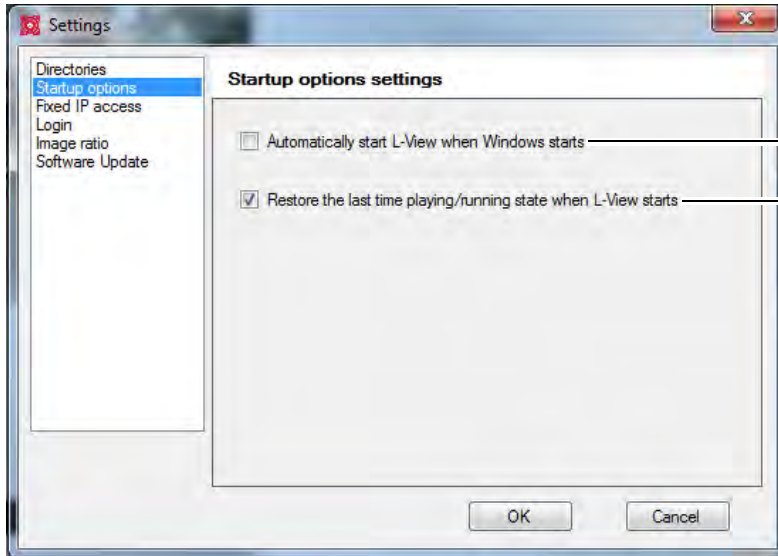
To change the Snapshot folder:

1. Click **Change**.
2. Select a new Snapshot folder and click **OK** to save changes.

3.8.2 STARTUP OPTIONS

The Startup options menu allows you to configure startup options for L-View.

To configure startup options:



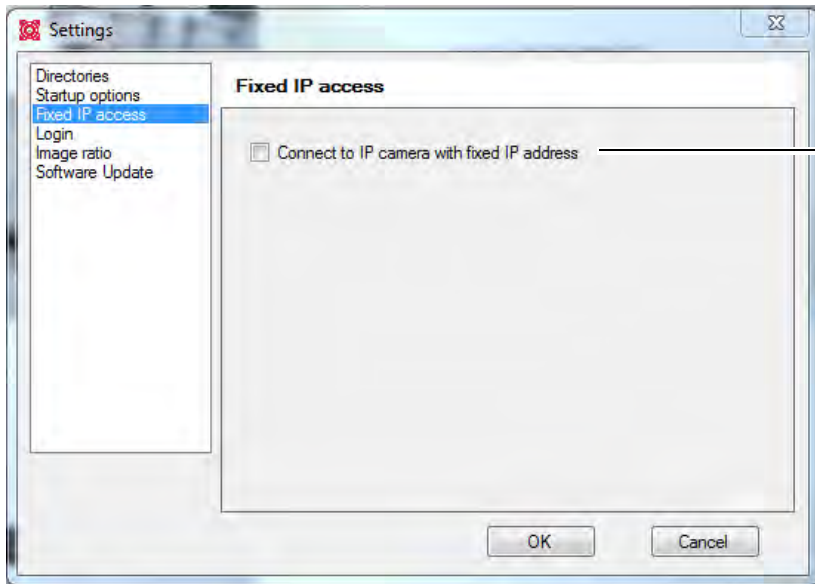
Check for L-View to open automatically when your computer turns on

Check to restore camera layout and connect to previously open cameras when L-View opens

1. Check **Automatically start L-View when Windows starts** to have L-View open when your computer is turned on.
2. Check **Restore the last time playing/running state when L-View starts** to set L-View to restore the camera layout and connect to all the previously open cameras when L-View opens.
3. Click **OK** to save changes.

3.8.3 FIXED IP ACCESS

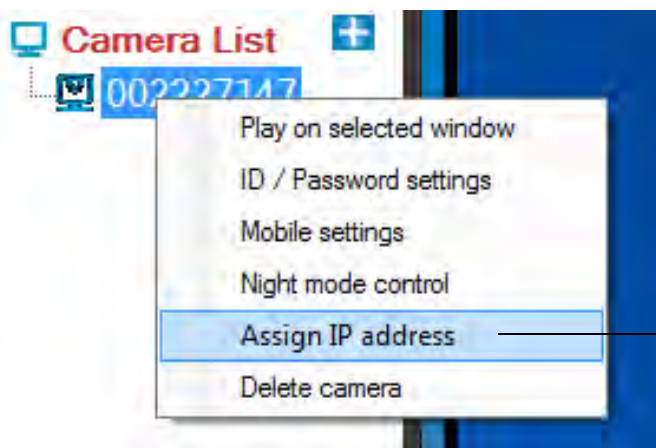
The **Fixed IP Access** menu is for **advanced users only**. It must be used if you have assigned your camera a fixed IP address on your router.



Check to enable Fixed IP addresses for cameras

To configure your camera to use a fixed IP address:

1. Check **Connect to the camera with a fixed IP address** to enable cameras to use fixed IP addresses.
2. Click **OK** to save changes.
3. In the camera list, right-click the camera you would like to configure and select **Assign IP Address**.

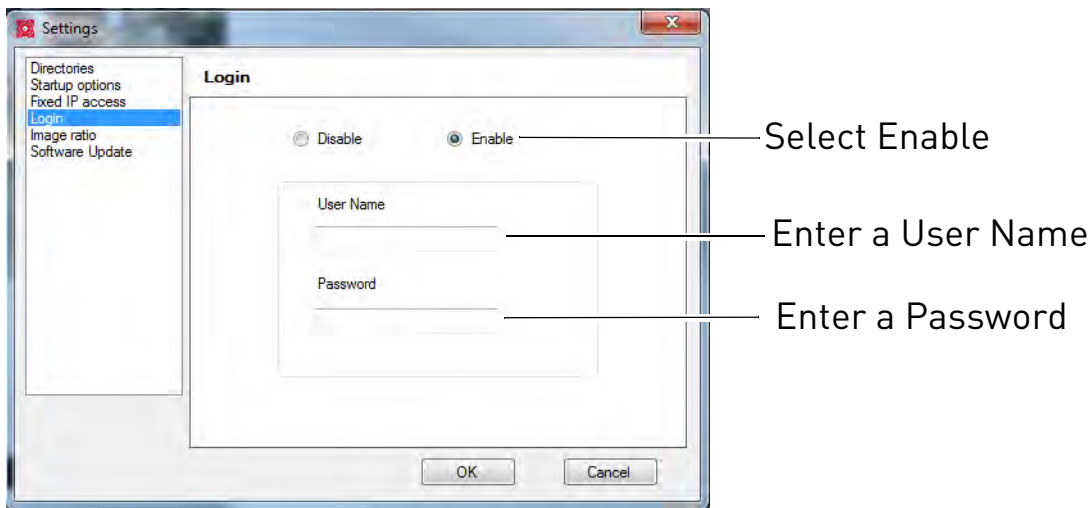


Assign IP address

4. Enter the camera's internal IP address and click **OK**.

3.8.4 LOGIN (ENABLING A PASSWORD TO ACCESS L-VIEW)

The Login menu allows you to enable a password to open L-View.

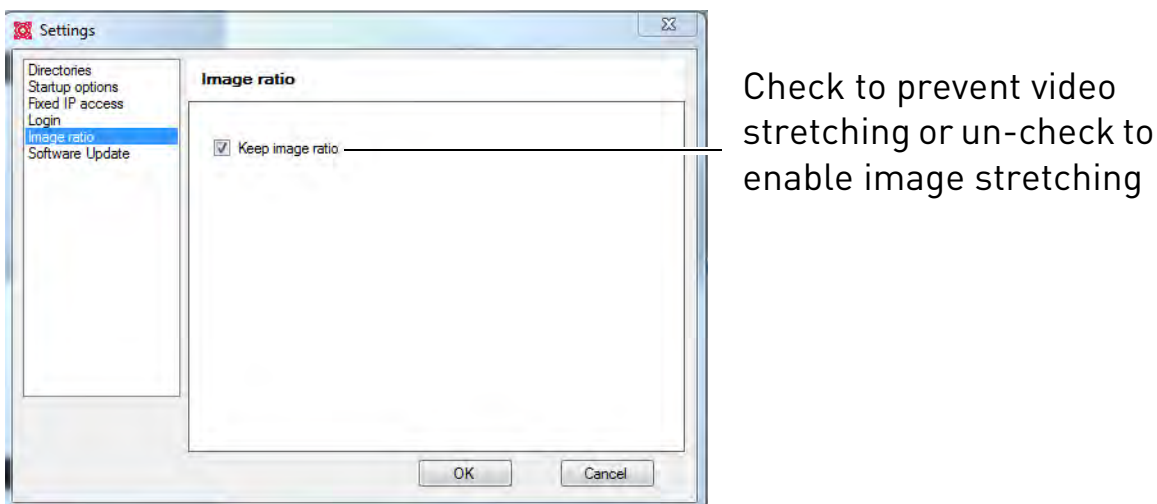


To enable a password for L-View:

1. Select **Enable**.
2. Under **User Name** and **Password**, enter the desired user name and password that must be used when you open L-View.
3. Click **OK** to save changes. The next time you exit L-View and re-open it, it will ask you for a password to log in.

3.8.5 IMAGE RATIO

The Image Ratio menu allows you to configure L-View to preserve the original aspect ratio of the video, or to allow the video to stretch to fill the display area.

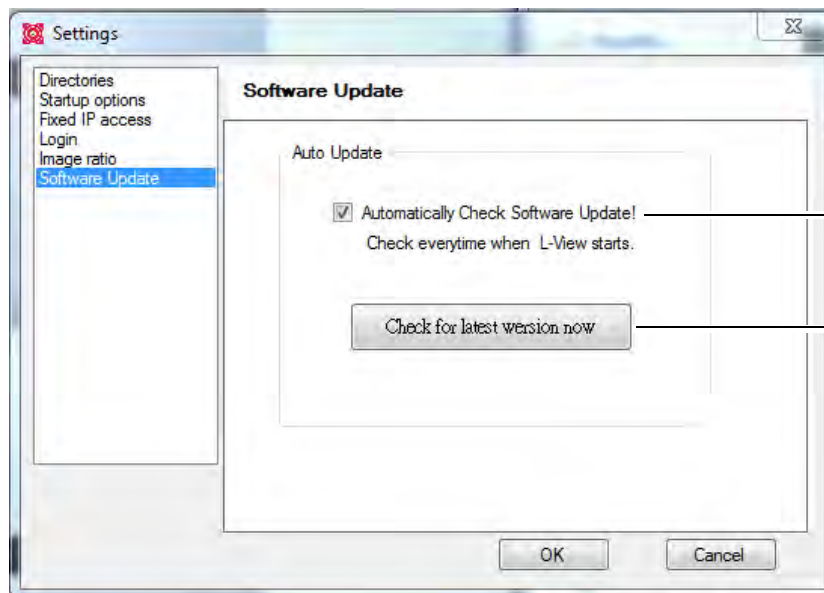


To configure Image Ratio:

1. Check **Keep Image Ratio** to not allow any stretching of the image (bars may appear on the sides of the image). Un-check **Keep Image Ratio** to stretch the image to the entire size of the display.
2. Click **OK** to save changes.

3.8.6 SOFTWARE UPDATE

The Software Update menu allows you to enable automatic updates of L-View or the camera firmware. It also allows you to manually check for updates.



Check to have L-View look online for updates when it opens

Click to manually check for updates

To enable automatic upgrades:

1. Check **Automatically Check Software Update**.
2. Click **OK**. L-View will check online for an software updates when it opens. If an update is available, follow the on-screen instructions to install the update.
 - It will also check for camera updates when a new firmware is available. If a new camera firmware is available, click **OK** and enter the admin user name (default: **admin**) and password (default: **left blank**). Then, wait for the upgrade to complete. **Do not unplug the camera power cable or Ethernet cable during firmware updates.** The camera will reboot during the firmware upgrade process.

To manually check for an update:

- Click **Check for latest version now**. If an update is available, follow the on-screen instructions to install the update.

4. L-VIEW FOR MAC

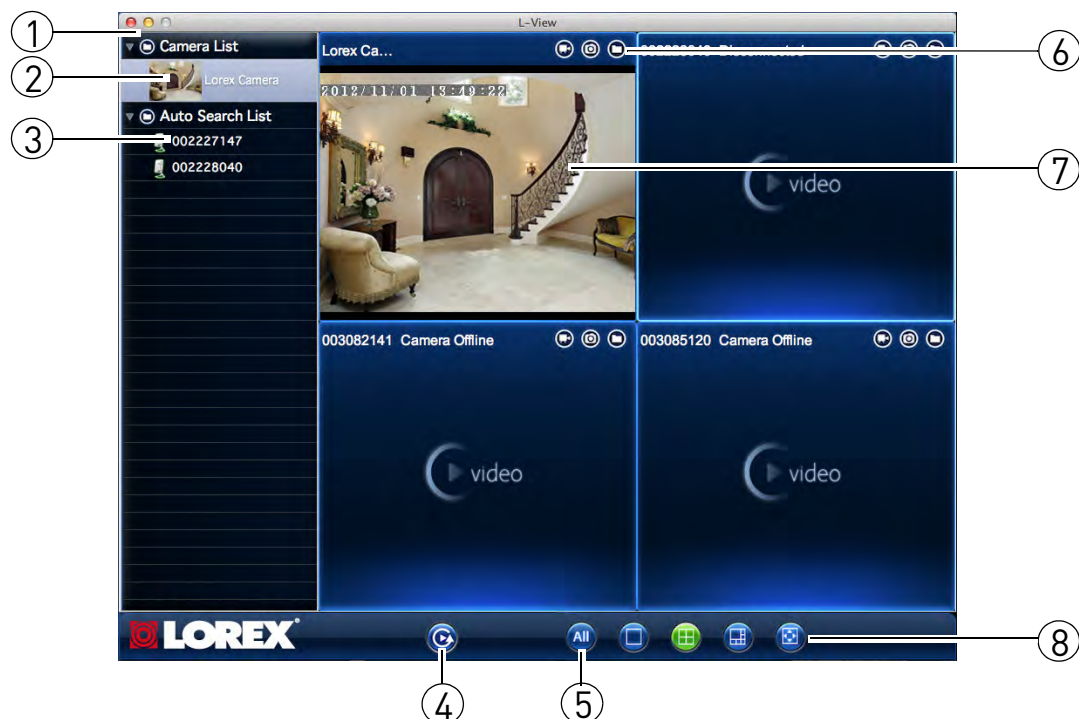
L-View for Mac allows you to view your camera on a Mac computer. L-View for Mac is available as a free download from www.lorextechnology.com.

For instructions on connecting to your camera using Mac, see “Connecting to your Camera on a Mac” on page 11.

4.1 SYSTEM REQUIREMENTS

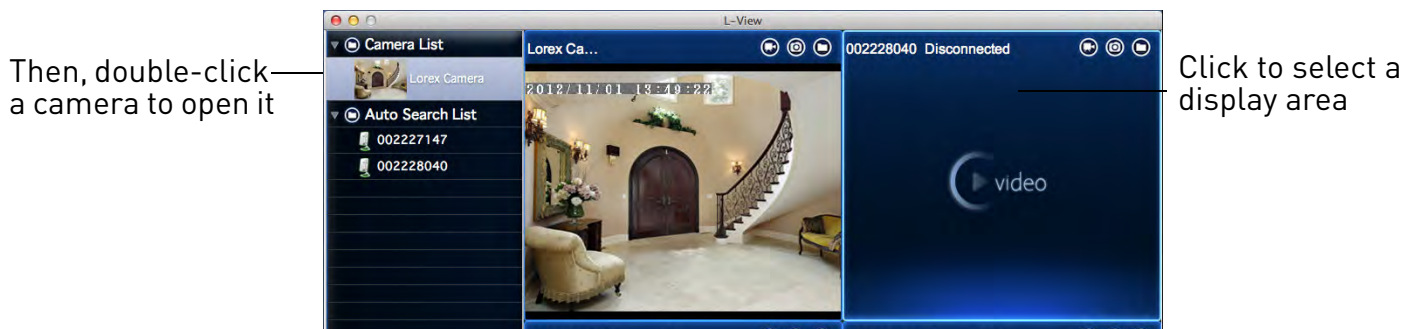
Description	Minimum System Requirements
CPU	2.0 GHz (dual-core recommended)
Memory	2GB
Operating System	OS X 10.6.8 Snow Leopard (Intel Processors only)
Hard Drive	Minimum 5~10 GB free for recordings

4.2 L-VIEW FOR MAC INTERFACE



1. **Window Controls:** Click to exit or minimize L-View.
2. **Camera List:** Shows cameras that have been saved in L-View. Double-click cameras to connect to them.

NOTE: To connect to multiple cameras, click to select a display area. The selected area is highlighted. Then, double-click the camera to open it in the selected area.



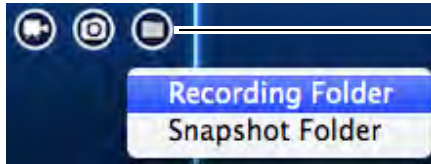
3. **Auto Search List:** Auto Search shows cameras located on your local network (LAN).
 - Double-click the camera ID to view the camera.
 - Drag the camera to the Camera List to save the camera.
 - Right-click the camera ID and select **Web configure** to configure the camera settings using a browser. See “Configuring Camera Settings using a Web Browser” on page 134.



Right-click the camera ID and select Web configure to open the Web Configuration tool

4.  **Playback:** Click to open Playback mode. For details, see “Playing Back Video from your Mac’s Hard Drive” on page 91.
5.  **All Camera Action:** Click to perform an action on all cameras.
6. **Recording Controls:**
 -  **Record:** Click to start/stop manual recording. For details, see “Recording Video to your Mac’s Hard Drive” on page 90.
 -  **Snapshot:** Click to take a snapshot from the camera. To view snapshots, click  and select Snapshot folder.

-  **Folder:** Click to open the recording folder or snapshot folder for this camera.



Click to open recording or snapshot folder

7. **Display Area:** Shows video from your camera.

- Double-click to view the camera in full-screen; double-click again to exit full-screen.
- Right-click and click **Stop** to close the selected camera.
- Click a display area to select it. The top of the area turns orange. L-View plays audio from the camera in the currently selected area.

8. **Split-screen Controls:**

-  : Click to open single camera view.
-  : Click to open 4-camera view.
-  : Click to open 6-camera view.
-  : Click to open the current display in full-screen. Press **ESC** to exit full-screen.

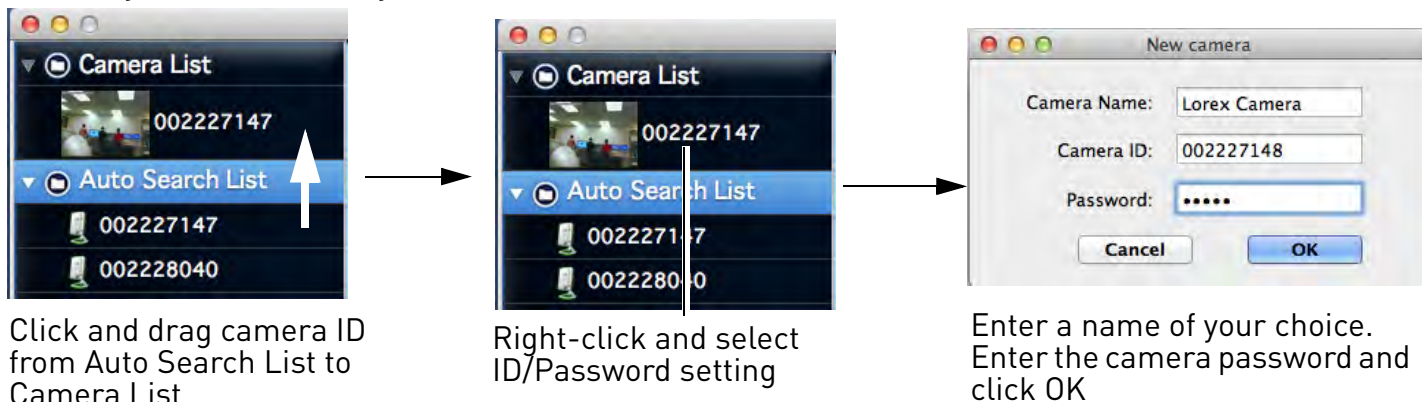
4.3 CAMERA LIST (MANAGING CAMERAS)

The Camera List is used to save connection information for your cameras, so you don't have to re-enter the ID or password each time you connect. It also allows you to configure certain camera settings (see "Using Camera List to Modify Camera Settings" on page 94).

4.3.1 ADDING CAMERAS TO CAMERA LIST

- If the camera is on the same network as the computer, click and drag the ID from the Auto Search List to the camera list. Then right-click the ID and click **ID/Password**

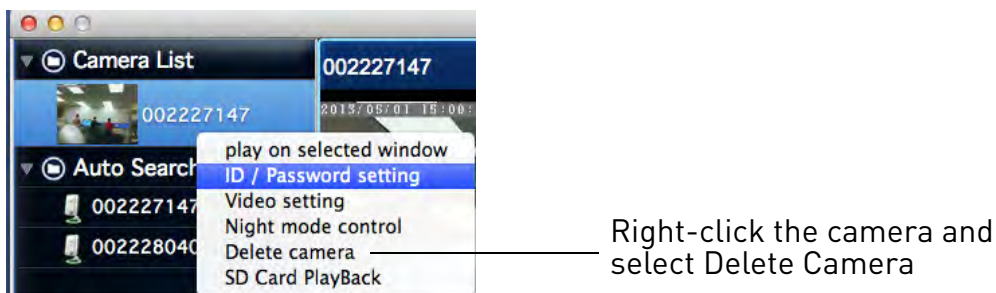
setting. Enter the camera password. If you want, you can also enter a Camera Name of your choice for your camera. Click **OK**.



- If you are adding a camera over the Internet, see “Connecting to a Camera Over the Internet (PC)” on page 7.

4.3.2 DELETING CAMERAS FROM CAMERA LIST

- Right-click the camera in Camera List and select **Delete Camera**. Click **OK** to confirm.



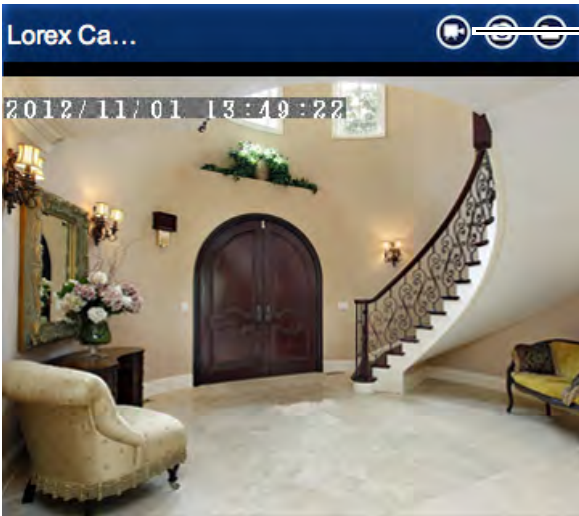
4.4 RECORDING VIDEO TO YOUR MAC'S HARD DRIVE

You can manually record video to your computer's hard drive.

To record video to your Mac's hard drive:

1. Press the recording button () to start recording. The recording button will turn green during recording.

2. Press the recording button again () to stop recording.



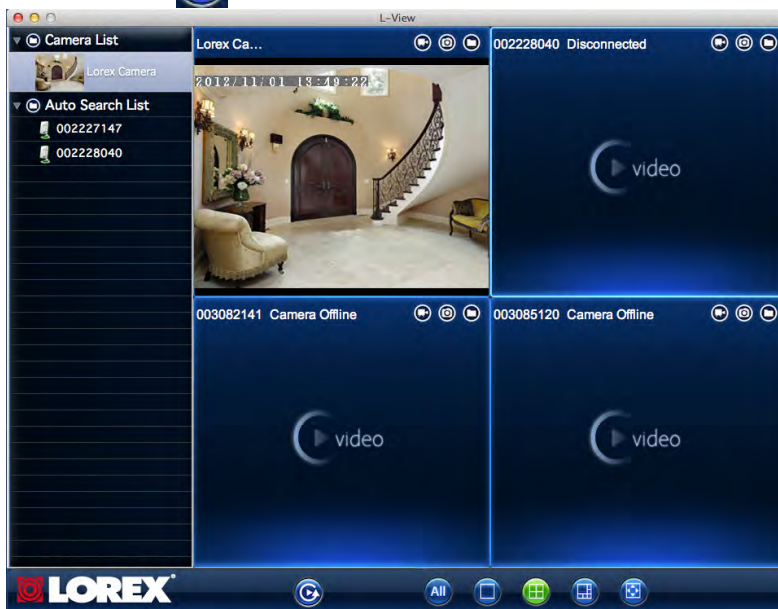
Click to Start/Stop recording

4.4.1 PLAYING BACK VIDEO FROM YOUR MAC'S HARD DRIVE

You can playback video files you have saved to your Mac's hard drive in L-View.

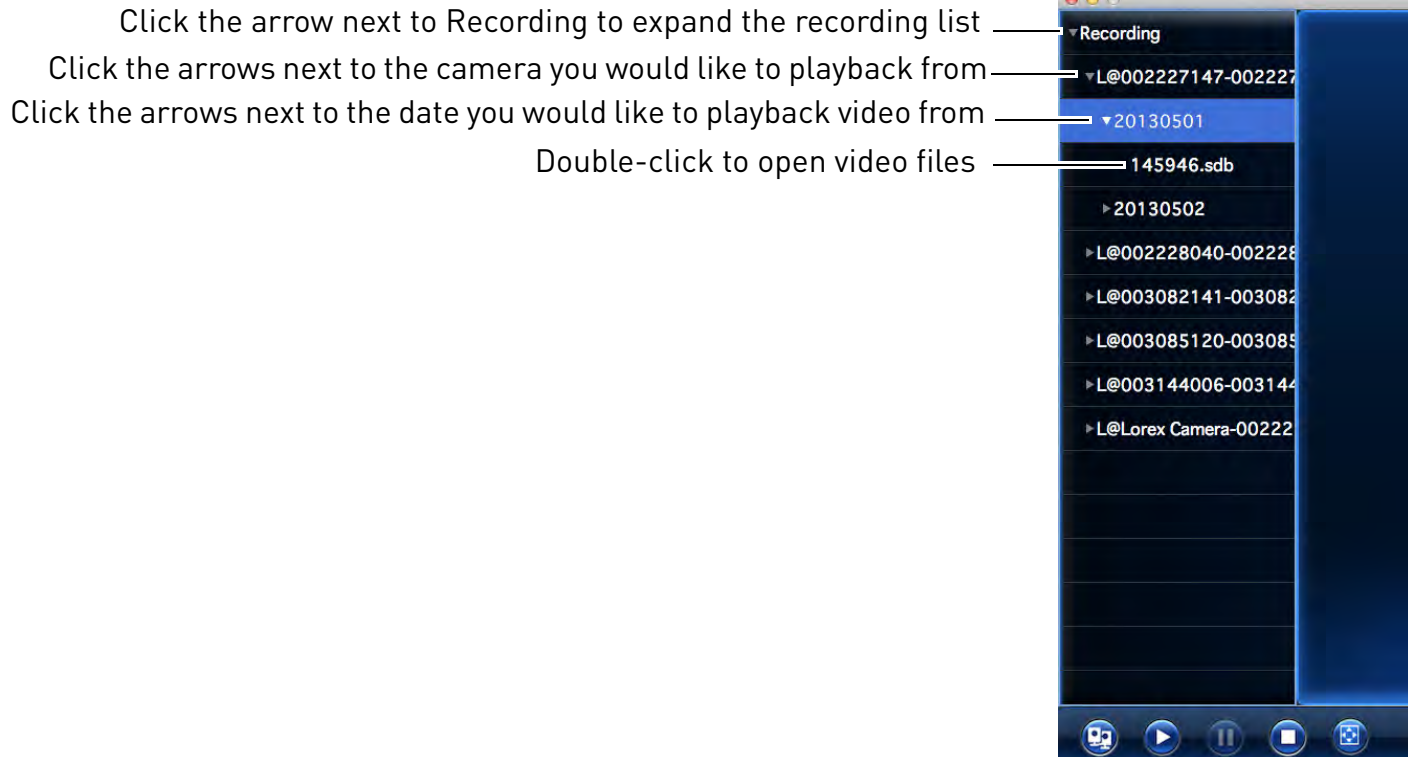
To play back video from your Mac's hard drive:

1. Use the instructions above to record some video if you have not done so already.
2. Click the Playback button ().



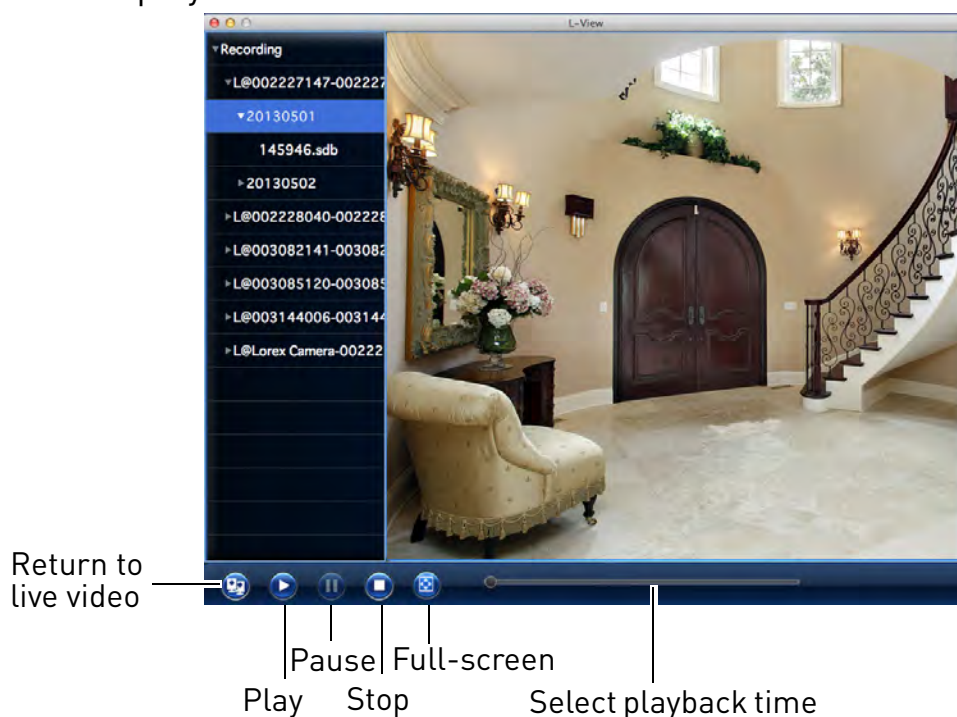
Click to open Playback mode

3. Select the video file you would like to playback.



NOTE: Dates are shown using *yyyymmdd* format (e.g. *20121016* is *October 16, 2012*).
Video timestamps are shown using *hhmmss* format (e.g. *103045* is *10:30:45am*).

4. Use the on-screen playback controls.

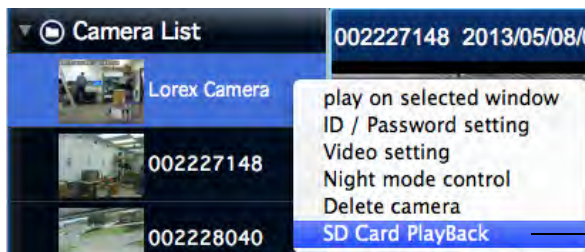


4.5 PLAYING BACK RECORDINGS ON THE MICROSD CARD WITH L-VIEW

You can use L-View to play back recordings on the camera's microSD card (not included). to set up microSD recording, you must use the camera's web configuration tool. For details, see "SD Card (Configuring microSD Recording)" on page 147.

To play back recordings on the camera's microSD card:

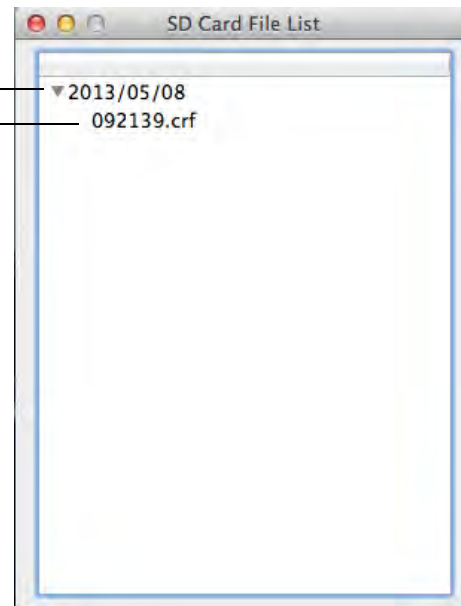
1. Right-click on the camera in Camera List and select **SD Card Playback**.



Right-click the camera and select SD Card Playback

2. Enter the password for the camera and click **OK**. L-View searches for recordings on the microSD card.
3. Select the file you would like to play back.

Click the arrow to view video recorded on that date
Double-click to open video files



NOTE: Video timestamps are shown using *hhmmss* format (e.g. *103045* is *10:30:45am*).

4. To return to live video, close the microSD window and double-click the camera in Camera List.

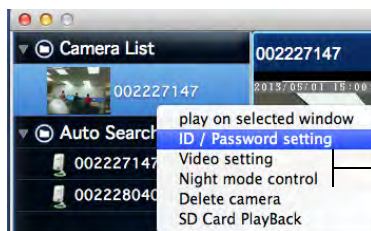
4.6 USING CAMERA LIST TO MODIFY CAMERA SETTINGS

You can use L-View to configure certain settings for the camera.

TIP: Change only one camera setting at a time before clicking Update so you can judge the effects.

To configure camera settings using Camera List:

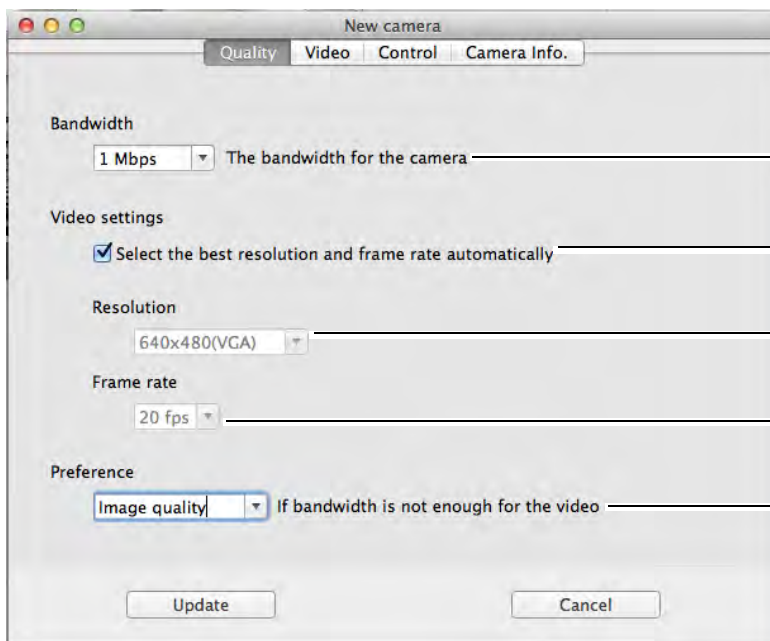
- Right-click on the camera in Camera List and select **Video settings** or **Night mode control**. See below for details.



Right-click on the camera and select Video settings or Night mode control

4.6.1 QUALITY TAB (CONFIGURE BANDWIDTH, RESOLUTION, AND FRAME RATE)

The Quality tab allows you to configure image quality settings such as the camera resolution, frame rate, and bandwidth settings.



Select Internet connection speed

Check to automatically adjust resolution and frame rate based on bandwidth available

Select Resolution

Select Frame Rate

Select how image quality will be affected when bandwidth is low

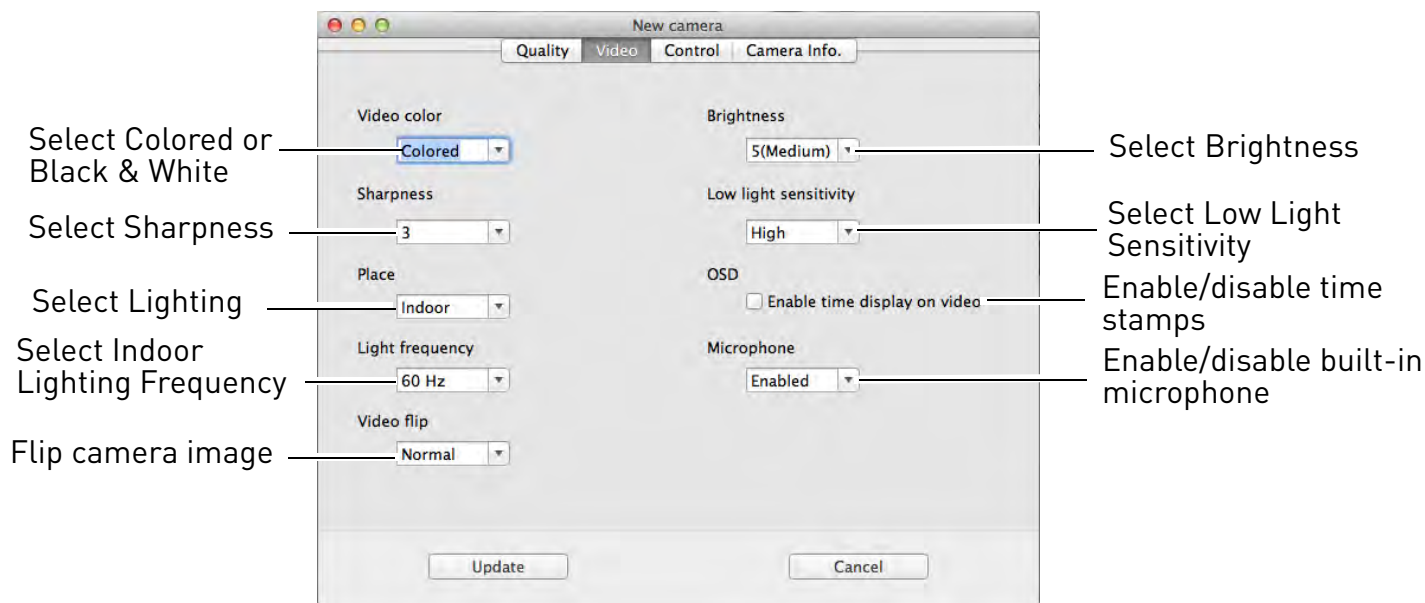
To configure image quality settings:

1. Right-click on the camera in Camera List and select **Video settings**. Select the **Quality** tab.
2. Under **Bandwidth**, select the speed of your Internet connection. If your Internet connection is faster than 3Mbps, select 3Mbps.
3. Check **Select the best resolution and frame rate automatically** to have the camera automatically adjust the resolution and frame rate based on bandwidth. Or, un-check it to manually configure the resolution and frame rate. If you are manually configuring the resolution and frame rate, configure the following:
 - **Resolution:** Manually select either **VGA** (640x480) or **QVGA** (320x240) resolution. VGA resolution will give you a better, more detailed picture, but requires more bandwidth. QVGA allows the camera to maintain a higher frame rate when available bandwidth is low.
 - **Frame rate:** Manually select the frame rate between **30fps** (highest) and **1fps** (lowest). 30fps is real time video, meaning that movement in the image will appear smooth, with no choppiness.
4. Under **Preference**, select your quality preference when bandwidth increases or decreases:
 - Select **Video motion** to have the camera maintain the frame rate and reduce image quality when bandwidth is insufficient.
 - Select **Image quality** to have the camera maintain image quality and reduce frame rate when bandwidth is insufficient.
 - Select **Better quality** to have the camera maintain frame rate and increase quality when bandwidth is sufficient.
 - Select **Best quality** to have the camera maintain the frame rate and increase quality to the maximum speed of the connection.
5. Click **Update** to save changes. Enter the camera admin user name (default: **admin**) and password (default: **left blank**) and click **OK**. Click **OK** to close the settings window.

NOTE: The camera may reboot after settings are changed. Wait about 30 seconds and then double-click the camera in Camera List or Auto Search to reconnect to the camera.

4.6.2 VIDEO TAB (CONFIGURE GENERAL VIDEO SETTINGS)

The Video tab allows you to configure general video settings, such as color and brightness settings.



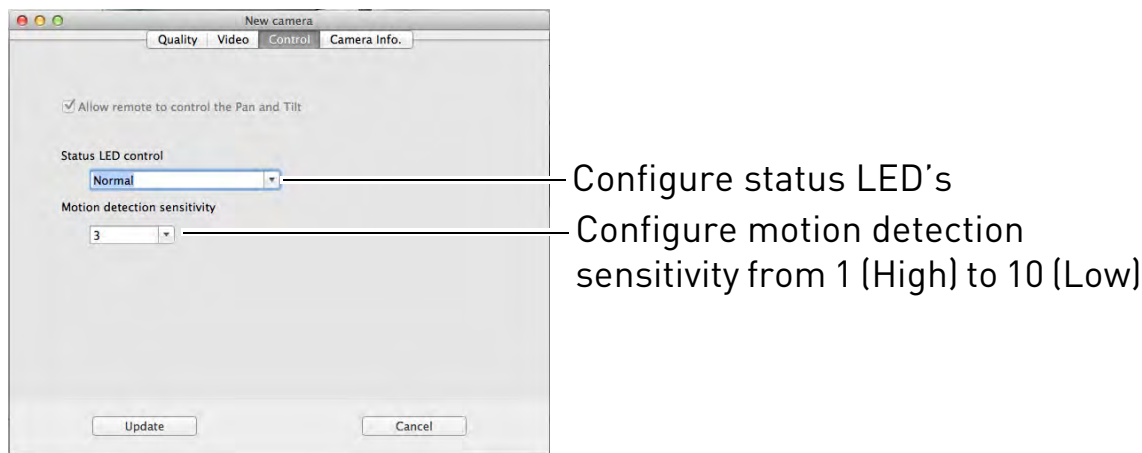
To configure general video settings:

1. Right-click the camera in Camera List and click **Video settings**. Then, select the **Video** tab.
2. Under **Video Color**, select **Colored** or **Black & White**.
3. Under **Sharpness**, select the sharpness of the image between **10** (highest) and **1** (lowest).
4. Under **Place**, select **Outdoor** if the area with the camera is brightly lit. Select **Indoor** if you notice strip lines in the image or if the picture is too dark on the Outdoor video setting. Select **Indoor + Sunlight** if the picture is too bright on the Indoor setting.
 - If you select Indoor or Indoor + Sunlight, select **60Hz** or **50Hz** under **Light Frequency** to adjust the camera for the frequency of your indoor lighting.
5. Under **Video Flip**, select **Flip** to flip the camera image vertically and horizontally or select **Normal** for normal orientation.
6. Under **Brightness**, select the brightness of the image between **10** (highest) and **1** (lowest).
7. Under **Low Light Sensitivity**, set the camera's sensitivity in low light environments between **Very High** (highest), **High**, and **Normal** (lowest).

8. Check **Enable time display on video** to turn on video time stamps or un-check it to disable video time stamps.
9. Under **Microphone**, select **Enabled** to enable the built-in microphone on the camera or select **Disabled** to disable the built-in microphone on the camera.
10. Click **Update** to save changes. Enter the camera admin user name (default: **admin**) and password (default: **left blank**) and click **OK**. Click **OK** to exit the settings window.

NOTE: The camera may reboot after settings are changed. Wait about 30 seconds and then double-click the camera in Camera List or Auto Search to reconnect to the camera.

4.6.3 CONTROL TAB (CONFIGURE STATUS LED'S AND MOTION DETECTION SENSITIVITY)



The Control tab allows you to configure the camera status LED's to make the camera harder to spot at night. It also allows you to configure the motion detection sensitivity when using video motion detection.

To configure the camera status LED's:

1. Right-click the camera in Camera List and click **Video settings**. Then, select the **Control** tab.
2. Under **Status LED Control**, select one of the following:
 - **Normal:** LED's will function as normal. For details on LED functions, see "Camera Overview" on page 1.
 - **Always turn off:** LED's are turned off at all times.
 - **Turn off after connected:** LED's turn on when the camera is powered on and turn off once a network connection is made.

3. Click **Update** to save changes. Enter the camera admin user name (default: **admin**) and password (default: **left blank**) and click **OK**. Click **OK** to exit the settings window.
NOTE: The camera may reboot after settings are changed. Wait about 30 seconds and then double-click the camera in Camera List or Auto Search to reconnect to the camera.

To configure motion detection sensitivity:

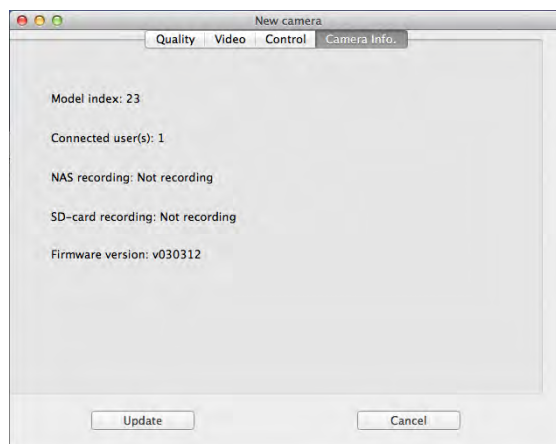
NOTE: The following method works when using video motion detection. It does not work when using PIR motion detection. For details on enabling motion detection and selecting video motion detection or PIR, see “Schedule” on page 144.

1. Right-click the camera in Camera List and click **Video settings**. Then, select the **Control** tab.
2. Under **Motion Detection Sensitivity**, select the motion detection sensitivity between **1** (High) and **10** (Low). If Motion Detection Sensitivity is set to 1, motion detection will be triggered if a moving object is larger than 1% of the video area. If it is set to 10, a moving object must be larger than 10% of the video area to trigger motion detection.
3. Click **Update** to save changes. Enter the camera admin user name (default: **admin**) and password (default: **left blank**) and click **OK**. Click **OK** to exit the settings window.

NOTE: The camera may reboot after settings are changed. Wait about 30 seconds and then double-click the camera in Camera List or Auto Search to reconnect to the camera.

4.6.4 CAMERA INFO TAB

The camera info tab shows system information about the camera.

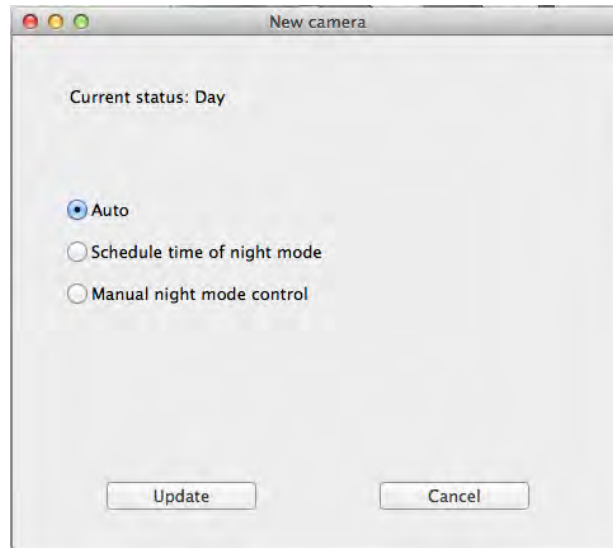


To access the camera info tab:

- Right-click on the camera in Camera List and select **Video Settings**. Then select the **Camera Info** tab.

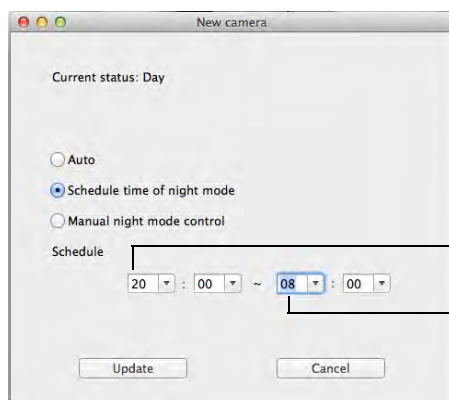
4.6.5 CONFIGURING NIGHT MODE SETTINGS

Configure when the camera uses day or night mode. When day mode is on, the camera sees in color. When night mode is on, the camera sees in black and white, and the Infrared LED turns on to enable night vision.



To configure night mode settings:

1. Right-click on the camera you want to configure in Camera List and select **Night mode control**.
2. Select one of the following:
 - **Auto:** Camera will automatically switch between day mode or night mode, based on the amount of light in the room.
 - **Scheduled time of night mode:** Camera will switch between day mode and night mode at a scheduled time each day. If using this option, use the first set of drop-down menus to select (in 24-hour time) the time the camera will switch to night mode and the second set of drop-down menus to select when the camera will return to day mode.

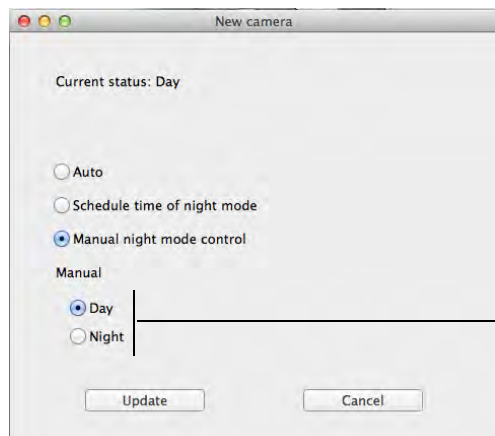


EXAMPLE

Start of night mode
(8:00 PM)

Return to day mode
(8:00 AM)

- **Manual night mode control:** Manually select day mode or night mode. If using this option, under **Mode**, select **Day** for day mode or **Night** for night mode.



Select day or night mode

3. Click **Update** to apply changes to your camera. Enter the admin user name (default: **admin**) and password (default: **left blank**) for the camera and click **OK**. Click **OK** to exit the settings window.

NOTE: The camera may reboot after settings are changed. Wait about 30 seconds and then double-click the camera in Camera List or Auto Search to reconnect to the camera.

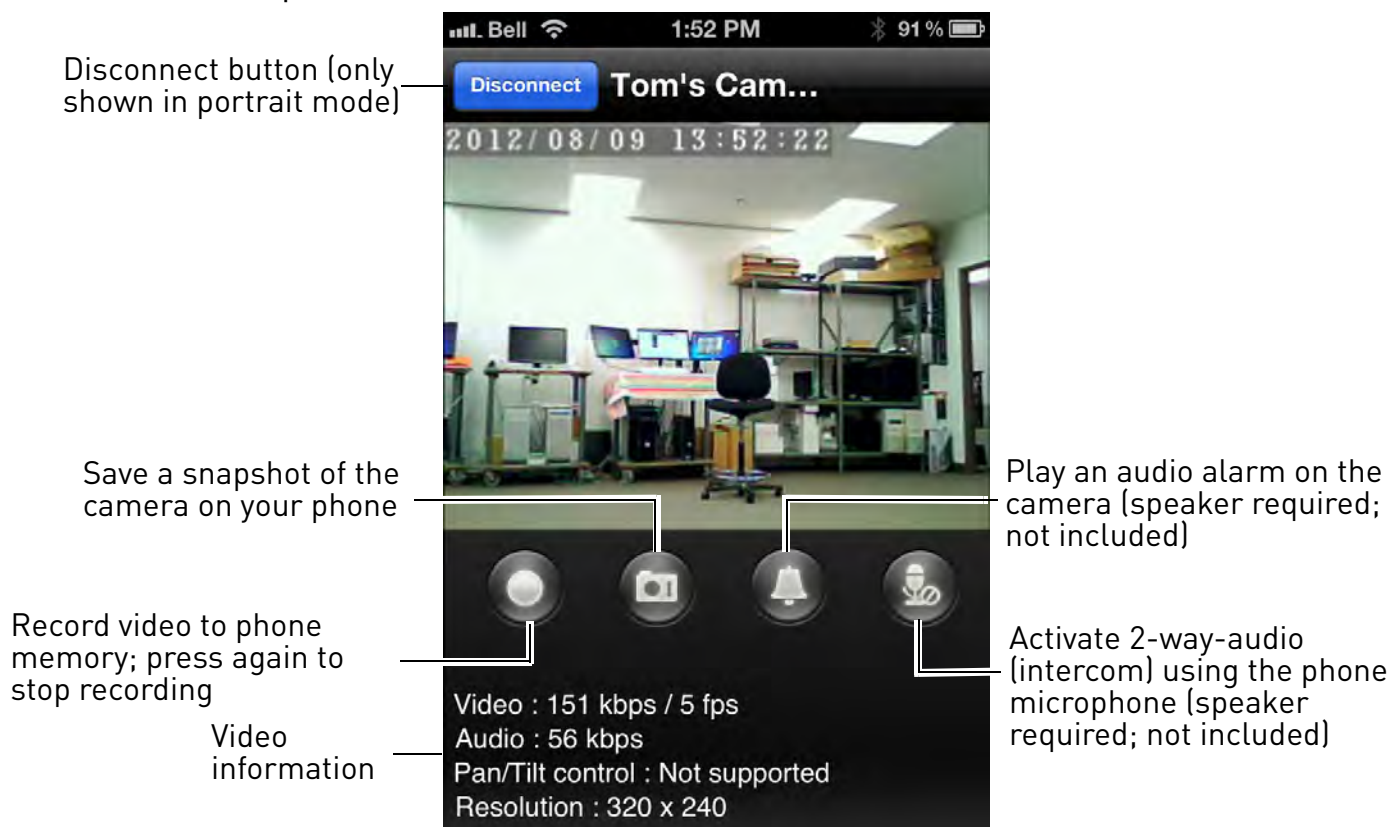
5. IPHONE APP

The app for iPhone is called **Lorex Ping iPhone**.

For instructions on connecting to your camera using an iPhone, see “Connecting to your Camera on iPhone” on page 12.

5.1 LIVE VIEWING WITH LOREX PING FOR IPHONE

You can use Lorex Ping in portrait or landscape mode. Tilt the phone to switch between portrait or landscape.



5.1.1 USING 2-WAY-AUDIO (INTERCOM)

1. While viewing, touch  to activate 2-way-audio (intercom) using the phone microphone (speaker required; not included).

- A volume slider appears that allows you to adjust the speaker volume.

• Touch  again to turn off 2-way audio.



Turn off 2-way-audio

Adjust speaker volume

5.1.2 TAKING SNAPSHOTS

- While viewing, tap  to take a snapshot from the camera. You can view snapshots using the Camera app or save photos to your computer by connecting your iPhone to your computer using a USB cable.

5.1.3 RECORDING VIDEO TO IPHONE

You can manually record video from your camera directly to your iPhone's built in memory.

To record video to your iPhone's memory:

1. While viewing, tap  to start recording.

2. Tap  again to stop recording. To view the recorded video, see below.

5.2 PLAYING BACK VIDEO RECORDED ON IPHONE

After using the record button to record video to your iPhone, you can playback video on iPhone.

5.2.1 USING PLAYBACK

1. From the Camera List, tap Playback ().

NOTE: If you are still connected to the camera, tap **Disconnect** to return to the Camera List. Disconnect only appears when holding the phone in portrait mode.

2. Tap the name of the camera you would like to select.



Tap the camera you would like to playback video from

3. Tap the date of the video recording you would like to playback. Then tap the desired video file to start playback.
4. Use the on-screen video controls to control playback. Tap **Stop** to return to the file list.

5.3 PLAYING BACK VIDEO RECORDED ON MICROSD ON IPHONE

You can playback video recorded on the camera microSD card (not included) on your iPhone. For details on setting up microSD recording, see “Configuring microSD Recording” on page 84.

To play back video recorded on the camera microSD card:

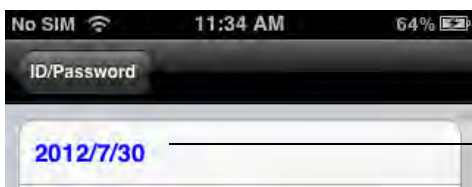
1. From the Camera List, tap  to open the camera settings page.
2. Scroll down and tap **SD card playback**.

3. Select the camera you would like to playback from.



Select camera for microSD playback

4. The camera scans for recorded video files and shows a list of days with recorded video. Tap a day to view recordings created on that day.

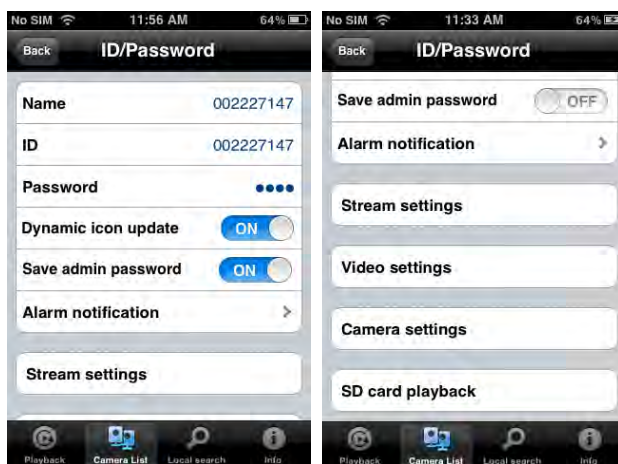


Tap a day to view recorded videos from that day.

5. Tap a recording to play it.
6. Tap **Disconnect** to return to the recordings list.

5.4 USING CAMERA LIST TO EDIT CAMERA SETTINGS

You can use the Camera List to adjust the connections settings or other settings for your camera.



To access Camera Settings:

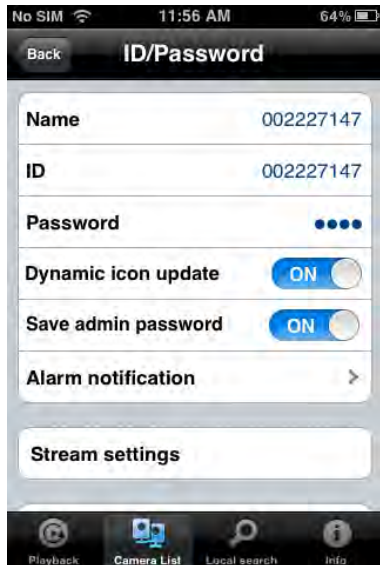
1. Tap Camera List . Then tap  next to the camera you would like to edit.
2. For certain menus, you will need to enter the camera admin user name and password before you may change settings. By default, the admin user name is **admin** and the password is **left blank**.

5.4.1 EDITING CAMERA CONNECTION SETTINGS

You can edit your camera connection information. This is useful if you change the password of the camera or if you want to save the admin user name and password, so you don't have to enter it to make settings changes.

To edit camera connection settings:

1. In Camera List, tap  next to the camera you would like to edit.



— Edit Camera Name

— Edit Password

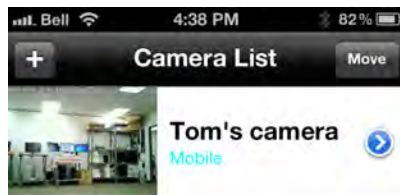
— Enable/disable automatic icon updates

— Enable/disable saving admin user name and password next time entered

2. Change the **Name** and **Password** as needed.
3. Under **Dynamic icon update**, select **ON** to have the camera icon automatically update every time you connect to the camera, or select **OFF** to keep the icon as is.
4. Under **Save admin password**, select **ON** to have Lorex Ping save the admin user name and password the next time you enter it, or **OFF** to require the admin user name and password whenever settings changes are made.
5. Tap **Back** to save changes and return to camera list.

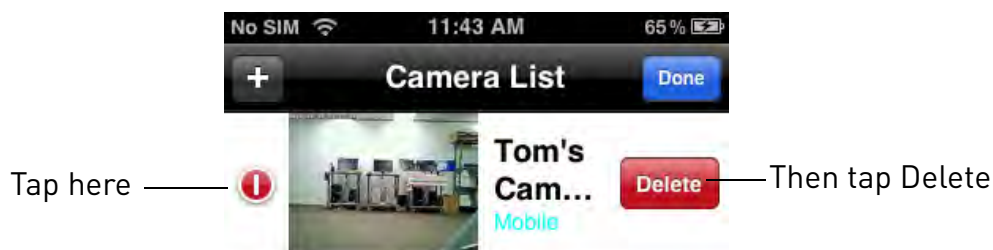
5.4.2 DELETING CAMERAS FROM CAMERA LIST

1. In Camera List, tap **Move**.



— Tap Move

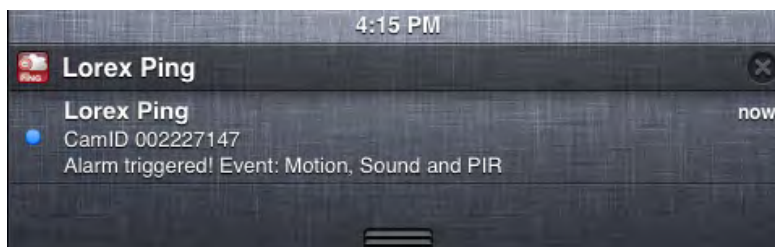
2. Tap  next to the camera you would like to delete then tap **Delete** to confirm.



3. Tap **Done**.

5.4.3 EDITING ALARM NOTIFICATION SETTINGS (PUSH NOTIFICATIONS)

Push Alarm Notifications can be set up to create a notification straight to your iPhone when motion or sound is detected by the camera. Push Alarm Notifications go directly to the notifications area on your device.



Example of Push Notification

To enable Push Alarm Notifications:

1. In Camera List, tap  next to the camera.
2. Tap **Alarm notification**.



- Enable/disable push notifications for video motion detection
- Enable/disable push notifications for sound
- Select sensitivity for sound push notifications
- Enable/disable push notifications for PIR motion detection

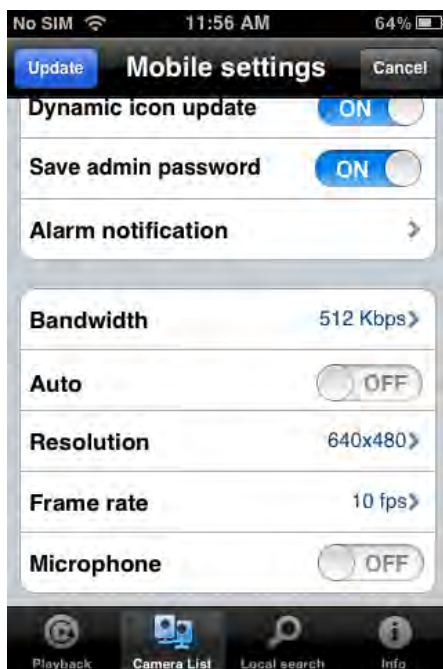
3. Under **Motion**, select **ON** to enable Push Alarm Notifications when motion is detected using video motion detection or **OFF** to disable.
4. Under **PIR**, select **ON** to enable Push Alarm Notifications when motion is detected using the PIR motion sensor or **OFF** to disable.
5. Under **Sound**, select **ON** to enable Push Alarm Notifications when sound is detected by the camera or **OFF** to disable. Under **Sound Sensitivity**, select a sensitivity for Sound Push Alarm Notifications between **1** (lowest) and **10** (highest).
6. Tap **Update** to save your settings

5.4.4 EDITING CAMERA MOBILE STREAMING SETTINGS

Configure the camera image quality settings for streaming to mobile devices (i.e. smart phones and tablets). Please note that less bandwidth is generally available over mobile networks than over WiFi or Ethernet.

To edit mobile streaming settings:

1. In Camera List, tap  next to the camera.
2. Tap **Stream Settings**.



- Select Mobile Bandwidth
- Enable/disable auto resolution and frame rate adjustment
- Select Resolution
- Select Frame rate
- Enable/disable audio streaming

3. Under **Bandwidth**, select the bandwidth for your mobile connection. If you are mainly connecting using WiFi, you may set this setting higher.

4. Under **Auto**, select **ON** to have the camera automatically select the resolution and frame rate based on available bandwidth. Or, select **OFF** to manually select the resolution and frame rate. If you select OFF, configure the following:
 - Under **Resolution**, select the resolution that will be used when connecting to the camera using a smart phone or tablet: **320x240** (QVGA) or **640x480** (VGA).
 - Under **Frame rate**, select the frame rate that will be used when connecting to the camera using a smart phone or tablet between 30fps (highest) and 1fps (lowest).
5. Under **Microphone**, select **OFF** to turn off audio streaming to your mobile device or tap to select **ON** to turn on audio streaming to your mobile device.
6. Tap **Update** to save your settings.

5.4.5 EDITING CAMERA VIDEO SETTINGS

1. In Camera List, tap  next to the camera.
2. Tap **Video Settings**.
3. Tap **Video**.



— Select Color or Black & White

— Select Brightness

— Select Sharpness

— Select Low light sensitivity

— Select environment settings

— Select quality preference

— Enable/disable time stamps

— Enable/disable video flip

4. Configure the following:

- **Video color:** Select **Colored** to view the camera in color or select **Black & white**. Tap **Video** to return to Video settings.
- **Brightness:** Manually adjust the brightness of the image between **10** (highest) and **1** (lowest). Tap **Video** to return to Video settings.
- **Sharpness:** Manually adjust the sharpness of the image between **10** (highest) and **1** (lowest). Tap **Video** to return to Video settings.
- **Low Light Sensitivity:** Set the camera's sensitivity in low light environments between **Very High** (highest), **High**, and **Normal** (lowest). Tap **Video** to return to Video settings.
- **Place:** Select **Outdoor** for well lit environments. Select **Indoor** if you notice strip lines in the image or if the picture is too dark on the Outdoor video setting. Select **Indoor + Sunlight** if the picture is too bright on the Indoor Video setting. If you select an indoor setting, select **60Hz** or **50Hz** to adjust the camera for the frequency of your indoor lighting. Tap **Video** to return to Video settings.
- **Preference:** Select whether you would like the camera to reduce the image quality or the frame rate when bandwidth increases or decreases. Select **Video Motion** to have the camera maintain the frame rate and reduce image quality when bandwidth is insufficient. Select **Image Quality** to have the camera maintain image quality and reduce frame rate when bandwidth is insufficient. Select **Better Quality** to have the camera maintain frame rate and increase quality when bandwidth is sufficient. Select **Best Quality** to have the camera maintain the frame rate and increase quality to the maximum speed of the connection. Tap **Video** to return to Video settings.
- **Time Display on Video:** Select **ON** to enable time stamps on video or **OFF** to disable time stamps.
- **Video flip:** Select **ON** to flip the camera image vertically and horizontally or select **OFF** for the normal orientation. This is useful if the camera has been mounted to a wall or ceiling upside down.

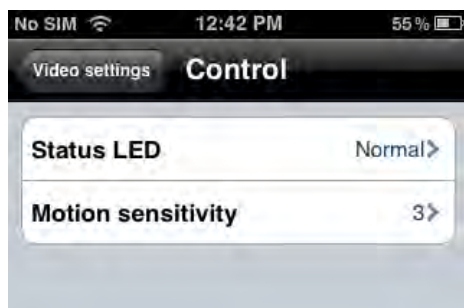
5. Tap **Video Settings** when finished making changes, then tap **Update** to save your settings.

5.4.6 CONFIGURING LED CONTROL AND MOTION DETECTION SENSITIVITY

Configure the behavior of the camera status LED's. This is useful if you want the camera to be harder to spot at night. You can also configure the sensitivity for video motion detection.

To configure LED's and motion detection sensitivity:

1. In Camera List, tap  next to the camera.
2. Tap **Video Settings**. Then tap **Control**.



- Select LED behavior
- Select video motion detection sensitivity

2. Under **Status LED**, select one of the following:
 - **Normal:** LED's will function as normal. For details on LED functions, see "Camera Overview" on page 1.
 - **Always turn off:** LED's are turned off at all times.
 - **Turn off after network connected:** LED's turn on when the camera is powered on and turn off once a network connection is made.
3. Tap **Control** to return to the Control menu.
4. Under **Motion Sensitivity**, select the motion detection sensitivity between **1** (High) and **10** (Low). If Motion Detection Sensitivity is set to 1, motion detection will be triggered if a moving object is larger than 1% of the video area. If it is set to 10, a moving object must be larger than 10% of the video area to trigger motion detection. Tap **Control** to return to the Control menu.

NOTE: This setting does not affect the PIR motion detector.

5. Tap **Video Settings** when finished making changes, then tap **Update** to save your settings.

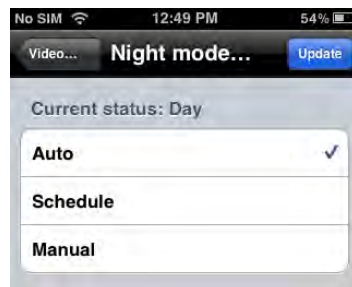
5.4.7 CONFIGURING NIGHT MODE SETTINGS

Configure when the camera uses day or night mode. When day mode is on, the camera sees in color. When night mode is on, the camera sees in black and white, and the Infrared LED turns on to enable night vision.

To configure Day/Night mode:

1. In Camera List, tap  next to the camera you would like to edit.

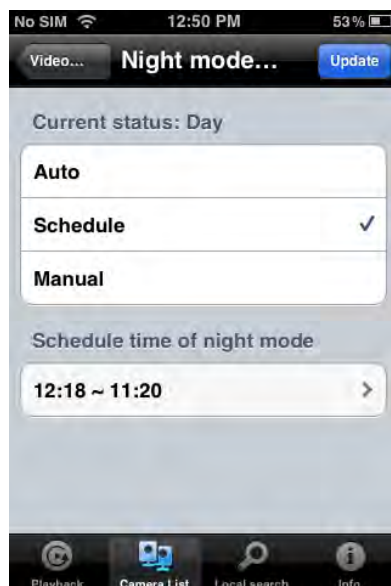
2. Tap **Video Settings**. Then tap **Night Mode Control**.



Select Night Mode control type

3. Select one of the following:

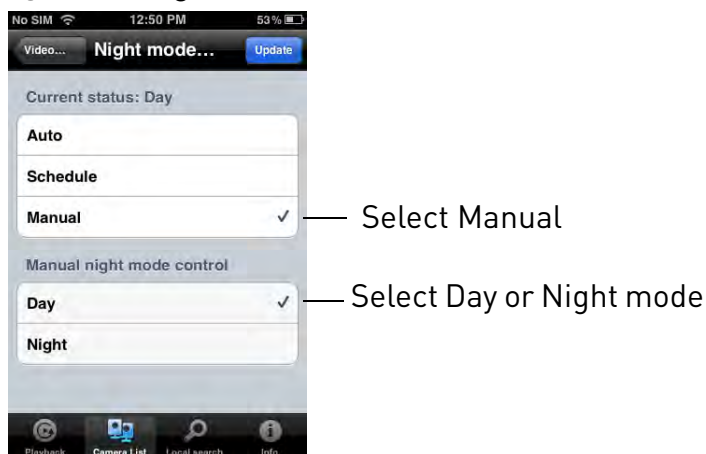
- **Auto:** Camera will automatically switch between day mode or night mode, based on the amount of light in the room.
- **Schedule:** Camera will switch between day mode and night mode at a scheduled times each day. If using this option, tap under **Schedule time of night mode**, use the sliders to set the **Start** time (when night mode begins each day) and **End** time (when night mode ends each day), then tap **OK**.



Select Schedule to schedule day/night mode switch

Tap to configure day/night mode schedule

- **Manual:** Manually select day mode or night mode. If using this option, select **Day** for day mode or **Night** for night mode.



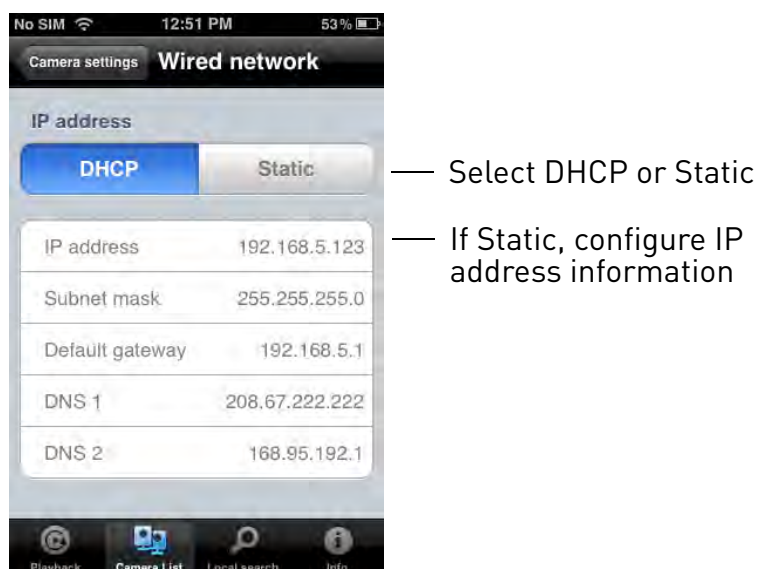
4. Tap **Update** to save your changes.

5.4.8 EDITING CAMERA WIRED NETWORK SETTINGS

Configure the camera IP address when connected using Ethernet. Select DHCP or Fixed IP.

To edit camera wired network settings:

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.
3. Tap **Network** then **Wired Network**.



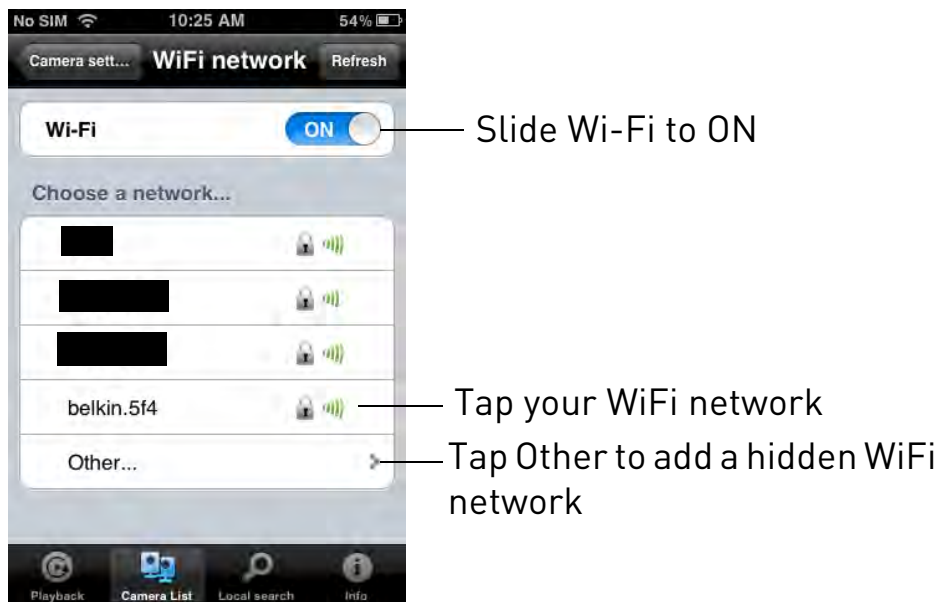
4. Select **DHCP** (recommended) to allow the camera to automatically obtain an IP address from the router or **Static** to use fixed IP address settings. If you select Static, configure your **IP Address**, **Subnet mask**, **Default gateway**, **DNS1**, and **DNS2**.
5. Tap **Update** to save your settings.

5.4.9 EDITING CAMERA WIFI NETWORK SETTINGS

Configure WiFi network settings for the camera. To setup the camera with a WiFi network, see “iPhone WiFi Setup” on page 23.

To edit camera WiFi settings:

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.
3. Tap **Network** then **WiFi Network**.
4. Slide WiFi to **ON** to enable WiFi on the camera and scan for available networks.
5. Tap a WiFi network and enter the password to connect.
 - To connect to a hidden WiFi network, tap **Other**. Enter the SSID and select the security type and tap **Add**. Tap the network name from the list and enter the password.



6. Wait for the update to complete.
7. Remove the Ethernet cable from the camera. It will connect to the WiFi network. When it is connected, the blue Network LED will be on or flashing.
8. Press **Camera Settings** then **Camera List** to exit the edit camera screen.

9. Tap the camera in the Camera List to connect. If you cannot connect, check to make sure you have entered the correct wireless password and that the camera is in signal range of your wireless router.

5.4.10 ENABLING EMAIL NOTIFICATIONS

Configure email alarms. The camera can be set up to send email alerts when motion is detected. Email alarms include a .jpg attachment.

To enable email notifications:

1. In Camera List, tap  next to the camera.
2. Tap **Camera Settings**.
3. Tap **Schedule** then **Email Alarm**.



— Enable/disable email notifications

— Select motion sensitivity for video motion

— Select email triggers

— Enable/disable email notifications

4. Under **Email trigger**, select **ON** to enable email notifications or **OFF** to disable. Then under **Send Email**, select **ON** to enable email notifications.
5. Under **Motion sensitivity**, select the motion detection sensitivity between **1** (High) and **10** (Low). If Motion Detection Sensitivity is set to 1, motion detection will be triggered if a moving object is larger than 1% of the video area. If it is set to 10, a moving object must be larger than 10% of the video area to trigger motion detection. Tap **Email alarm** to return to the Email Alarm menu.

NOTE: This setting does not affect the PIR motion detector.

6. Check the following trigger options for email alarms:

- **Motion:** Use Video motion detection to trigger email alarms. Video motion detection looks for movement in the image to determine if there is motion. This means that there may be false alarms caused by changes in lighting, trees moving in the wind, etc.
- **PIR:** Use the PIR motion detector to trigger email alarms. The PIR motion detector uses changes in temperatures (e.g. from a person moving around in front of the camera) to determine if there is motion. PIR motion detection is less effective at higher temperatures.

NOTE: You may also select both PIR and Motion to receive alarms from both motion triggers.

- **Schedule:** Send email alarms based on the settings configured in the Scheduling menu.

- **Disable:** Disable email alarms.

7. Enter up to 3 email addresses under **Recipient1~3** that will receive email alarms.



8. Tap **Update** to save your changes.

NOTE: If you want to use a custom SMTP server to send Email messages, click **SMTP Settings**, enter your SMTP server information, and tap **OK**.

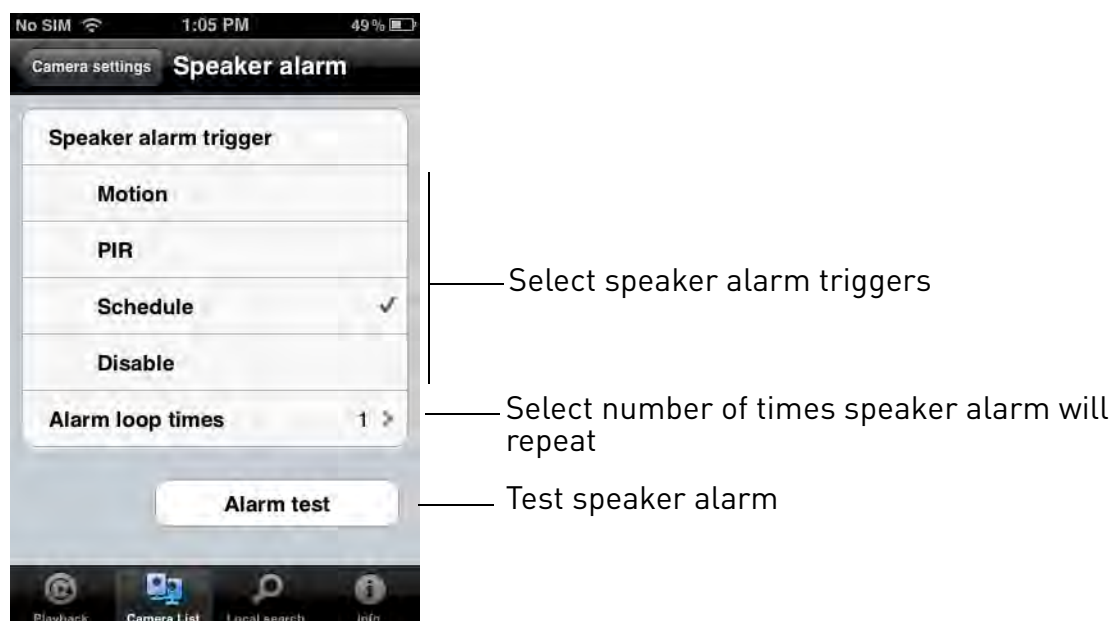
5.4.11 ENABLING SPEAKER ALARMS

Configure audio alarms using a speaker (not included) connected to the camera. Audio alarms can be set up to go off when the camera detects motion. This is helpful if you want to scare off intruders.

To configure speaker alarms:

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.

3. Tap **Schedule** then **Speaker Alarm**.



4. Under **Speaker Alarm Trigger**, check the triggers that will cause speaker alarms:

- **Motion:** Use Video motion detection to trigger audio alarms. Video motion detection looks for movement in the image to determine if there is motion. This means that there may be false alarms caused by changes in lighting, trees moving in the wind, etc.
- **PIR:** Use the PIR motion detector to trigger audio alarms. The PIR motion detector uses changes in temperatures (e.g. from a person moving around in front of the camera) to determine if there is motion. PIR motion detection is less effective at higher temperatures.

NOTE: You may also select both PIR and Motion to receive alarms from both motion triggers.

- **Schedule:** Create audio alarms based on the settings set in the Scheduling menu.
- **Disable:** Disable speaker alarms.

5. Under **Alarm Loop Times**, select the number of times you would like the speaker alarm to repeat when alarms occur.
6. Tap **Alarm Test** to sound a test alarm.
7. Tap **Update** to save your settings.

5.4.12 CONFIGURING MICROSD RECORDING

Configure video recording to the microSD card (required; not included). To playback recordings saved on the microSD card, use L-View or the iPhone, iPad, or Android apps.

To configure microSD card recording:

1. Make sure a microSD card (not included) is inserted into the camera. It is recommended to format the microSD card before using it with the camera.
2. In Camera List, tap  next to the camera you would like to edit.
3. Tap **Camera Settings**.
4. Tap **Schedule** then **SD-Card**.



— Enable microSD recording

— Select Always recording or
Schedule recording

— Select if you want the camera to
overwrite or stop recording when
the microSD card is full

5. Under **Recording**, select **ON** to enable microSD recording or **OFF** to disable.
6. Check one of the following recording options:
 - **Always Recording:** Camera will record continuously at all times.
 - **Schedule Recording:** Camera will record according to settings set in the recording schedule.

NOTE: To enable Motion detection recording using iPhone, you must use Schedule recording. Then, create a schedule in the Scheduling menu with Motion trigger, PIR trigger, or both Motion trigger and PIR trigger selected.

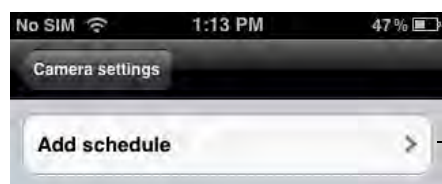
7. Under **When disk space full**, check **Overwrite** to set the camera to overwrite the oldest recordings when the microSD card is full or select **Stop recording** to set the camera to stop recording when the microSD card is full.
8. Tap **Update** to save your settings.

5.4.13 CONFIGURING THE CAMERA RECORDING AND ALARM SCHEDULE

Configure schedules for recording and alarms. Schedules can be configured separately for alarms and recording. You can configure up to 12 schedules.

To create a schedule for alarms or recording:

1. First, you must enable alarms or recording to use the schedule.
2. In Camera List, tap  next to the camera you would like to edit.
3. Tap **Camera Settings**.
4. Tap **Schedule** then **Scheduling**.
5. Tap **Add Schedule**.



— Add Schedule

6. Under **Email Alarm**, check **Motion trigger** to send an email alarm based on video motion, select PIR trigger to use the PIR motion sensor, or select both Motion Trigger and PIR trigger.



— Configure triggers for email alarms in this schedule

— Configure triggers for speaker alarms in this schedule

7. Under **Speaker Alarm**, check **Motion trigger** to create an audio alarm based on video motion, check **PIR trigger** to use the PIR motion sensor, or select both Motion trigger and PIR trigger.

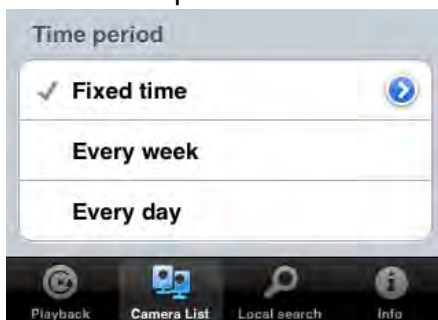
8. Under **SD card record**, check **Continuous** for the camera to record to microSD continuously during the scheduled time. Check **Motion trigger** to record when video motion is trigger during the scheduled time, select **PIR trigger** to record when the PIR motion sensor is triggered during the scheduled time, or select both.



Configure triggers for microSD recording in this schedule

9. Under **Time period**, select one of the following:

- **Every week:** Create a weekly recording schedule. Tap  and check the days you would like the schedule to apply to. Tap **Start** and **End** and use the sliders to configure the start and end time for the schedule. Tap **OK**.
- **Every day:** Create a daily recording schedule. Tap  then tap **Start** and **End** and use the sliders to configure the start and end time for the schedule. Tap **OK**.
- **Fixed time:** Create a one time schedule (for example, if you are going on vacation, and would like to record all the time). Tap  then tap **Start** and **End** and use the sliders to configure the exact date and time when you would like the schedule to start and end. Tap **OK**.

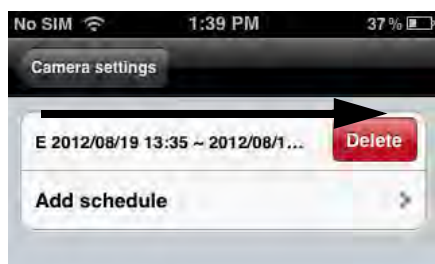


Configure schedule times

9. Tap **OK** to save the schedule. Tap **Update** to save your settings.

To delete a Schedule:

1. From the Scheduling menu, swipe the schedule you would like to delete from left to right.



Swipe from left to right and then tap delete to delete a schedule

2. Tap **Delete**.
3. Tap **Update** to save your changes.

5.4.14 CONFIGURING THE CAMERA DATE AND TIME

Configure the camera date and time. The camera syncs with an Internet NTP time server to automatically provide the correct time, once you have configured your time zone and daylight savings time settings.

To set the camera date and time:

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.
3. Tap **Admin** then **Date/Time**.



Tap Time zone

4. Tap **Time Zone**.

5. Use the slider to select your time zone.



— Select your time zone

— Enable Daylight Savings and configure start and end times for daylight savings

- If your region observes Daylight Savings Time, check **Daylight Savings Time**. Tap **Start Time** and **End Time**, use the sliders to configure the start and end time for Daylight Savings Time and then tap **OK**. Tap **Back** to return.
6. Tap **Update** to save your changes. Tap **OK**. The camera will reboot to apply the new time zone.

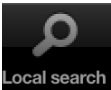
5.4.15 REBOOTING THE CAMERA

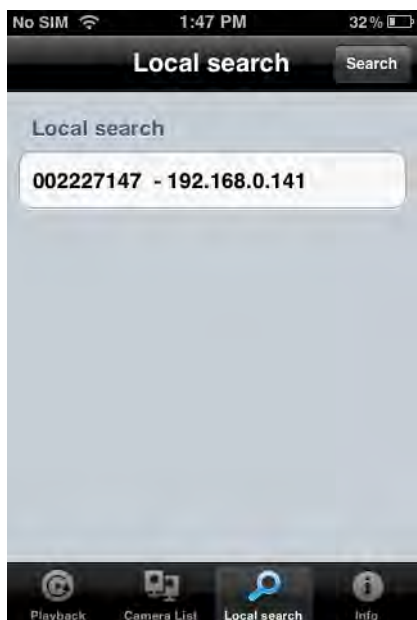
1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.
3. Tap **Admin** then **Reboot**.
4. Tap **OK** to confirm.

5.5 USING LOCAL SEARCH TO ADD CAMERAS

You can use the Local Search Menu to automatically add the ID's for cameras on your local network.

To add cameras using local search:

1. Tap the Local Search button ().
2. Lorex Ping automatically scans for cameras on your local network. Tap **Search** to re-scan.



— Tap Search to re-scan

— Tap a camera to add to camera list

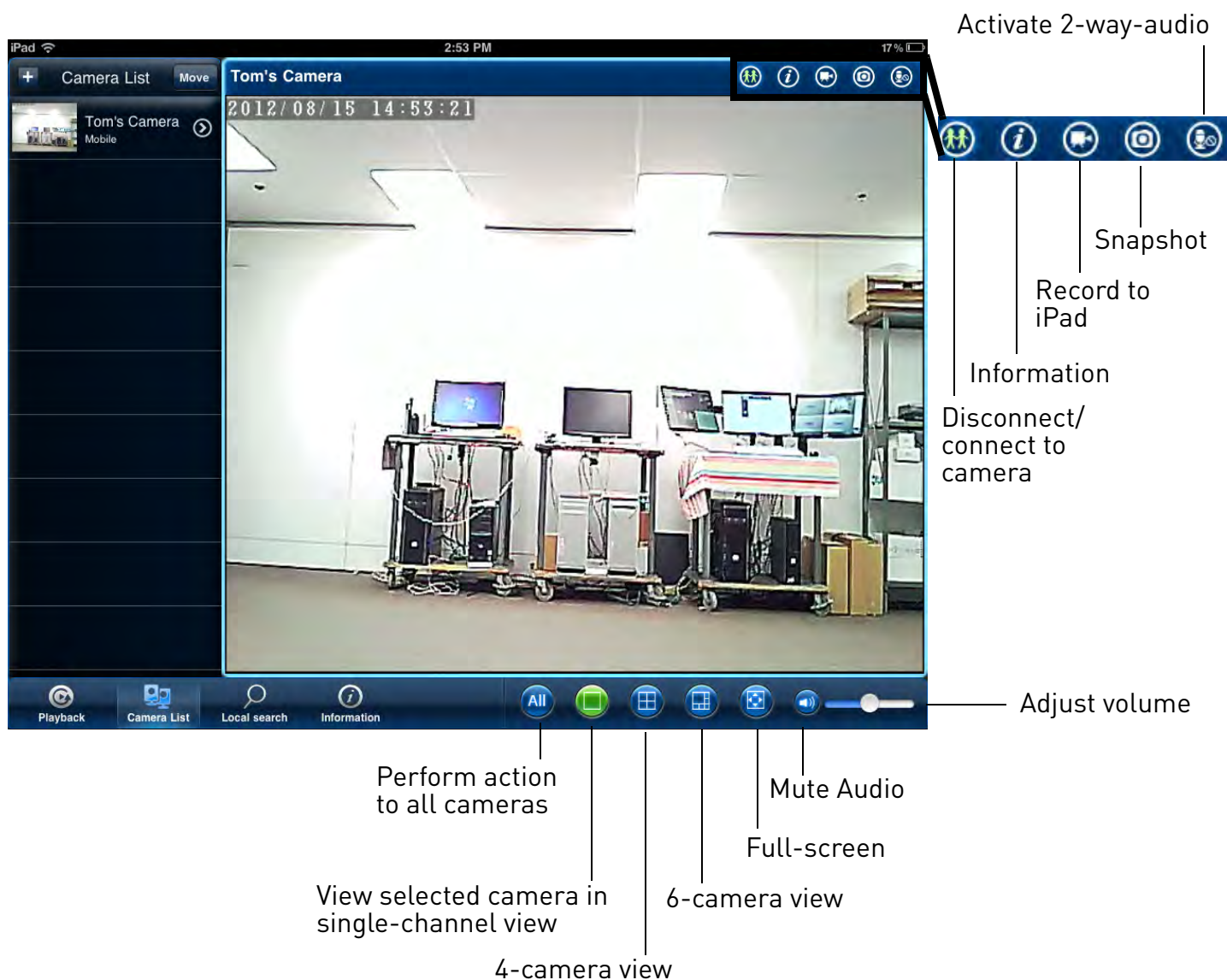
3. Tap a camera from the list. The Add camera screen comes on with the camera ID already entered.
4. Enter a **Name** of your choice and enter the camera **Password**. If you have not connected to your camera before, the password is **lorex**.
5. Tap **Done**. The camera is now added to camera list. Tap the camera name in camera list to connect to the camera.

6. IPAD APP

The app for iPad is called **Lorex Ping HD**.

For instructions on connecting to your camera using iPad, see “Connecting to your Camera on iPad” on page 15.

6.1 LIVE VIEWING WITH LOREX PING HD



6.1.1 USING 2-WAY AUDIO (INTERCOM)

1. While viewing, touch  to activate 2-way-audio (intercom) using the phone microphone (speaker required; not included).
2. Tap  again to deactivate 2-way-audio.

6.1.2 TAKING SNAPSHOTS

- While viewing, tap  to take a snapshot from the camera. You can view snapshots using the Camera app or save photos to your computer by connecting your iPad to your computer using a USB cable.

NOTE: There is no Camera app on 1st generation iPads. To view your snapshots, you must connect the iPad to your computer using a USB cable.

6.1.3 RECORDING VIDEO TO IPAD

You can manually record video from your camera directly to your iPad's built in memory.

To record video to your iPhone's memory:

1. While viewing, tap  to start recording.
2. Tap  again to stop recording. To view the recorded video, see below.

6.2 PLAYING BACK VIDEO RECORDED TO IPAD

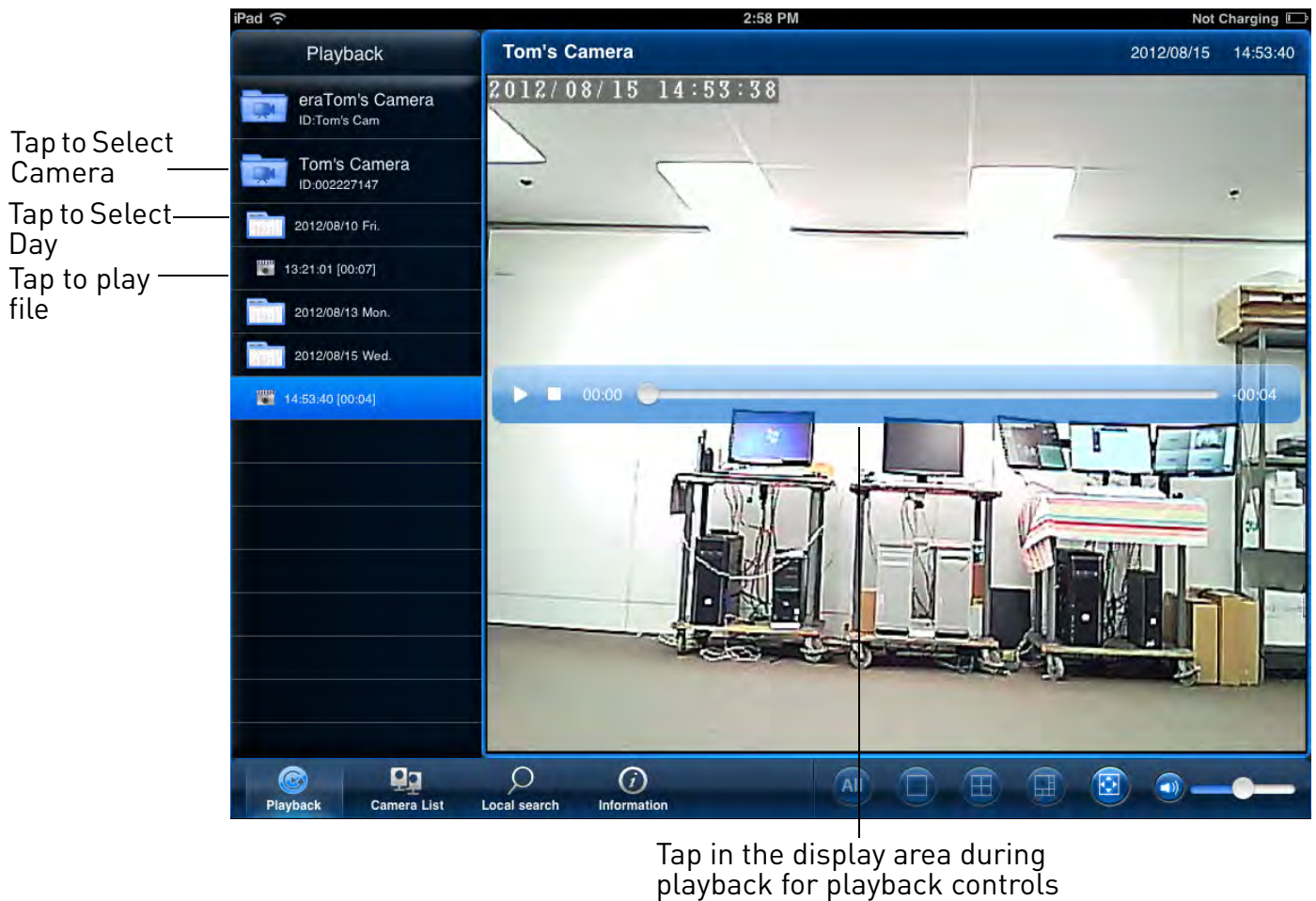
After using the record button to record video to your iPad, you can playback video on iPad.

To playback video recorded to iPad:



1. Tap the Playback button () then tap **iPad**.
2. Select the camera you would like to playback video from. A list of days with recorded video appears.
3. Tap a day to see recordings from that day. Tap a recording to start playback.

4. During playback, tap in the display area to bring up playback controls.



6.3 PLAYING BACK VIDEO RECORDED TO MICROSD ON IPAD

You can playback video recorded on the camera microSD card (not included) on your iPad. For details on setting up microSD recording, see “Configuring MicroSD Recording” on page 106.

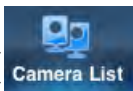
To play back video recorded on the camera microSD card:



1. Tap the Playback button () then tap **SD Card**.
2. Select the camera you would like to playback from.
3. The camera scans for recorded video files and shows a list of days with recorded video. Tap a day to view recordings created on that day.
4. Tap a recording to play it.

English



5. Tap the Camera List button () to exit playback.

6.4 USING CAMERA LIST TO EDIT CAMERA SETTINGS

You can use the Camera List to adjust the connections settings or other settings for your camera.

To access Camera Settings:

1. Tap Camera List . Then tap  next to the camera you would like to edit.
2. For certain menus, you will need to enter the camera admin user name and password before you may change settings. By default, the admin user name is **admin** and the password is **left blank**.



6.4.1 EDITING CAMERA CONNECTION SETTINGS

You can edit your camera connection information. This is useful if you change the password of the camera or if you want to save the admin user name and password, so you don't have to enter it to make settings changes.

To edit camera connection settings:

1. In Camera List, tap  next to the camera you would like to edit.

2. Change the **Name** and **Password** as needed.
3. Under **Dynamic icon update**, select **ON** to have the camera icon automatically update every time you connect to the camera, or select **OFF** to keep the icon as is.
4. Under **Save admin password**, select **ON** to have Lorex Ping save the admin user name and password the next time you enter it, or **OFF** to require the admin user name and password whenever settings changes are made.



Edit Camera Name

Edit Password

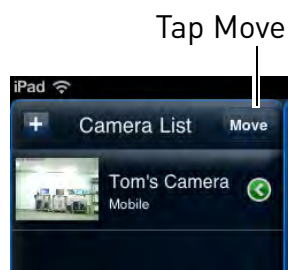
Enable/disable automatic icon updates

Enable/disable saving admin user name and password next time entered

5. Tap **Done** to save changes.

6.4.2 DELETING CAMERAS FROM CAMERA LIST

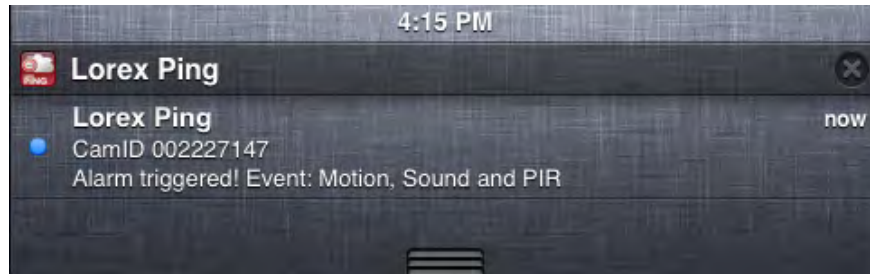
1. In Camera List, tap **Move**.



2. Tap  next to the camera you would like to delete then tap **Delete** to confirm.
3. Tap **Done**.

6.4.3 EDITING ALARM NOTIFICATIONS SETTINGS (PUSH NOTIFICATIONS)

Push Alarm Notifications can be set up to create a notification straight to your iPhone when motion or sound is detected by the camera. Push Alarm Notifications go directly to the notifications area on your device.



Example of Push Notification

To enable Push Alarm Notifications:

1. In Camera List, tap  next to the camera.
2. Tap **Alarm notification**.



3. Under **Motion**, select **ON** to enable Push Alarm Notifications when motion is detected using video motion detection or **OFF** to disable.

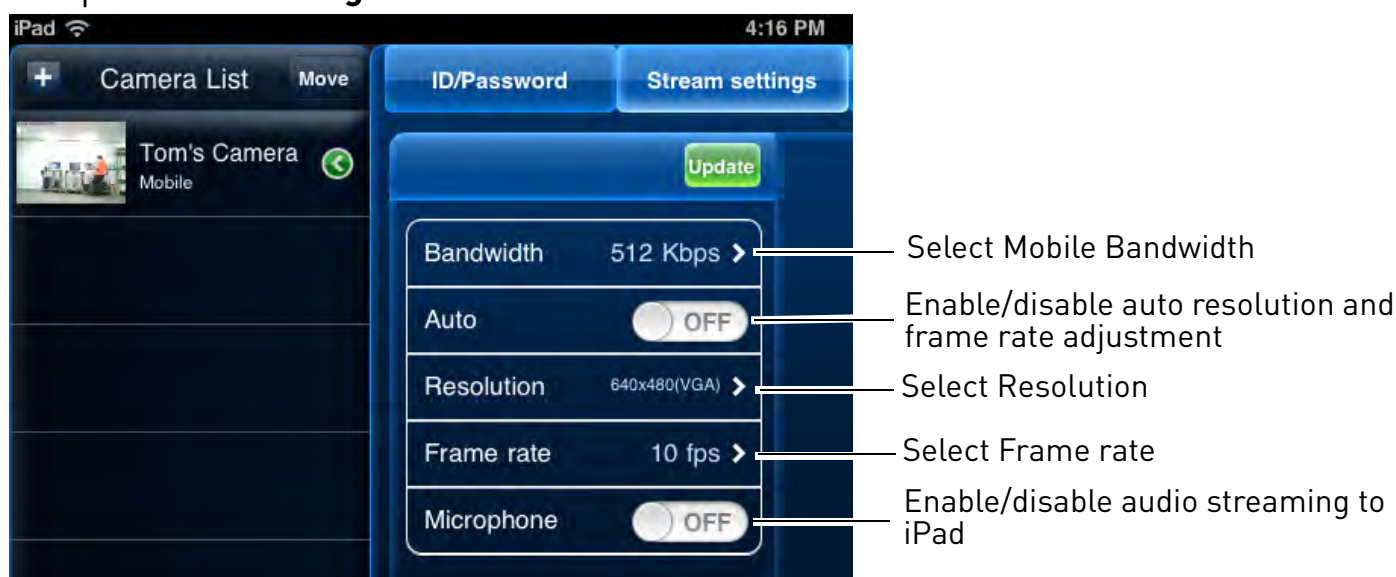
4. Under **PIR**, select **ON** to enable Push Alarm Notifications when motion is detected using the PIR motion sensor or **OFF** to disable.
5. Under **Sound**, select **ON** to enable Push Alarm Notifications when sound is detected by the camera or **OFF** to disable. Under Sound Sensitivity, select a sensitivity for Sound Push Alarm Notifications between **1** (lowest) and **10** (highest).
6. Tap **Update** to save your settings.

6.4.4 EDITING CAMERA MOBILE STREAMING SETTINGS

Configure the camera image quality settings for streaming to mobile devices (i.e. smart phones and tablets). Please note that less bandwidth is generally available over mobile networks than over WiFi or Ethernet.

To edit mobile streaming settings:

1. In Camera List, tap  next to the camera.
2. Tap **Stream Settings**.

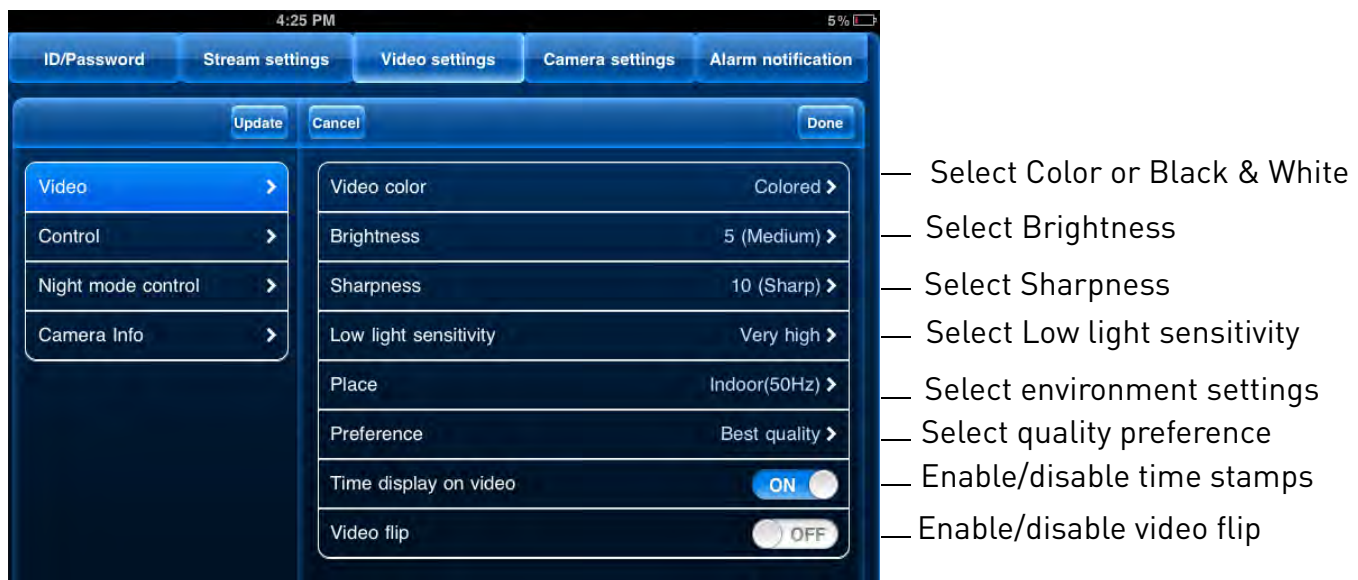


3. Under **Bandwidth**, select the bandwidth for your mobile connection. If you are mainly connecting using WiFi, you may set this setting higher.
4. Under **Auto**, select **ON** to have the camera automatically select the resolution and frame rate based on available bandwidth. Or, select **OFF** to manually select the resolution and frame rate. If you select OFF, configure the following:
 - Under **Resolution**, select the resolution that will be used when connecting to the camera using a smart phone or tablet: **320x240 (QVGA)** or **640x480 (VGA)**. Tap **Done** to confirm.

- Under **Frame rate**, select the frame rate that will be used when connecting to the camera using a smart phone or tablet between **30fps** (highest) and **1fps** (lowest). Tap **Done** to confirm.
5. Under **Microphone**, select **OFF** to turn off audio streaming to your mobile device or tap to select **ON** to turn on audio streaming to your mobile device.
 6. Tap **Update** to save your settings.

6.4.5 EDITING CAMERA VIDEO SETTINGS

1. In Camera List, tap  next to the camera.
2. Tap **Video Settings**.
3. Tap **Video**.



4. Configure the following:
 - **Video color:** Select **Colored** to view the camera in color or select **Black & white**. Tap **Done** to return to Video settings.
 - **Brightness:** Manually adjust the brightness of the image between **10** (highest) and **1** (lowest). Tap **Done** to return to Video settings.
 - **Sharpness:** Manually adjust the sharpness of the image between **10** (highest) and **1** (lowest). Tap **Done** to return to Video settings.
 - **Low Light Sensitivity:** Set the camera's sensitivity in low light environments between **Very High** (highest), **High**, and **Normal** (lowest). Tap **Done** to return to Video settings.
 - **Place:** Select **Outdoor** for well lit environments. Select **Indoor** if you notice strip lines in the image or if the picture is too dark on the **Outdoor** video setting. Select **Indoor**

+ **Sunlight** if the picture is too bright on the Indoor setting. If you select an indoor setting, select **60Hz** or **50Hz** to adjust the camera for the frequency of your indoor lighting. Tap **Done** to return to Video settings.

- **Preference:** Select whether you would like the camera to reduce the image quality or the frame rate when bandwidth increases or decreases. Select **Video Motion** to have the camera maintain the frame rate and reduce image quality when bandwidth is insufficient. Select **Image Quality** to have the camera maintain image quality and reduce frame rate when bandwidth is insufficient. Select **Better Quality** to have the camera maintain frame rate and increase quality when bandwidth is sufficient. Select **Best Quality** to have the camera maintain the frame rate and increase quality to the maximum speed of the connection. Tap **Done** to return to Video settings.
- **Time Display on Video:** Select **ON** to enable time stamps on video or **OFF** to disable time stamps.
- **Video flip:** Select **ON** to flip the camera image vertically and horizontally or select **OFF** for the normal orientation. This is useful if the camera has been mounted to a wall or ceiling upside down.

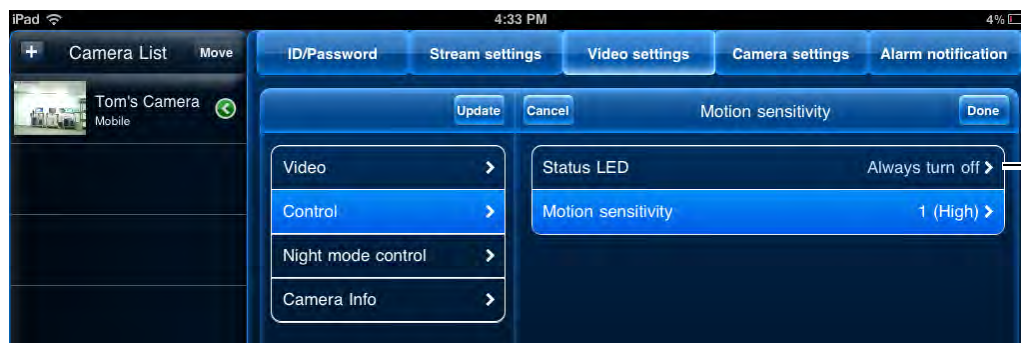
5. Tap **Update** to save your settings.

6.4.6 CONFIGURING LED CONTROL AND MOTION DETECTION SENSITIVITY

Configure the behavior of the camera status LED's. This is useful if you want the camera to be harder to spot at night. You can also configure the sensitivity for video motion detection.

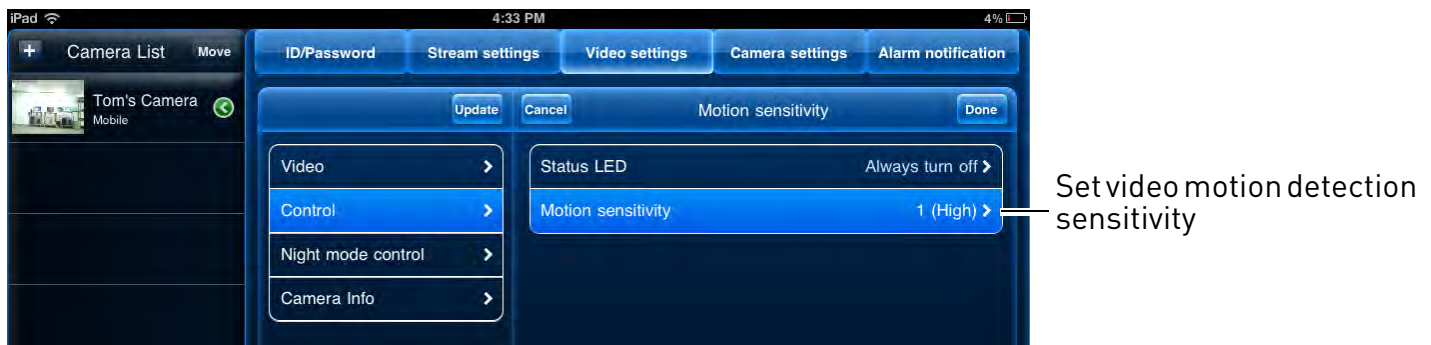
To configure LED's and motion detection sensitivity:

1. In Camera List, tap  next to the camera.
2. Tap **Video Settings**. Then tap **Control**.



Set control settings for status LED's

3. Under **Status LED**, select one of the following:
 - **Normal:** LED's will function as normal. For details on LED functions, see “Camera Overview” on page 1.
 - **Always turn off:** LED's are turned off at all times.
 - **Turn off after network connected:** LED's turn on when the camera is powered on and turn off once a network connection is made.
4. Tap **Done** to return to the Control menu.
5. Under **Motion Sensitivity**, select the motion detection sensitivity between **1** (High) and **10** (Low). If Motion Detection Sensitivity is set to 1, motion detection will be triggered if a moving object is larger than 1% of the video area. If it is set to 10, a moving object must be larger than 10% of the video area to trigger motion detection. Tap Control to return to the Control menu.



NOTE: This setting does not affect the PIR motion detector.

6. Tap **Update** to save your settings.

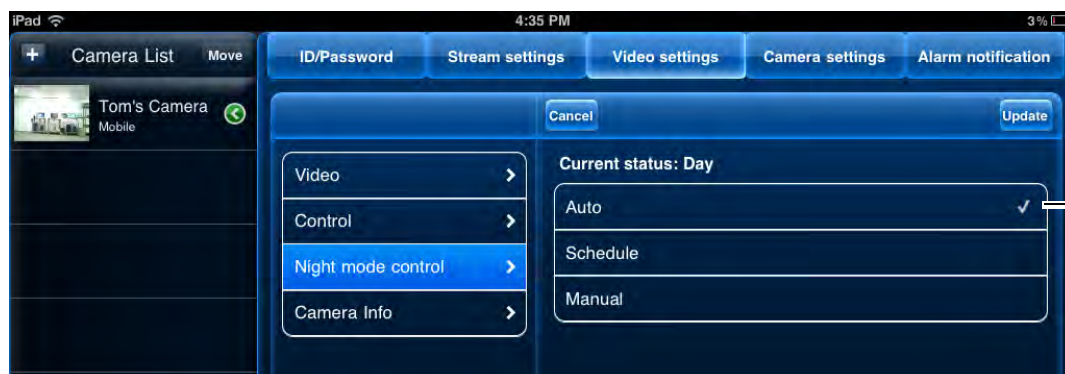
6.4.7 CONFIGURING NIGHT MODE SETTINGS

Configure when the camera uses day or night mode. When day mode is on, the camera sees in color. When night mode is on, the camera sees in black and white, and the Infrared LED turns on to enable night vision.

To configure Day/Night mode:

1. In Camera List, tap  next to the camera you would like to edit.

2. Tap **Video Settings**. Then tap **Night Mode Control**.



3. Select one of the following:

- **Auto:** Camera will automatically switch between day mode or night mode, based on the amount of light in the room.
- **Schedule:** Camera will switch between day mode and night mode at scheduled times each day. If using this option, tap under **Schedule time of night mode**, use the sliders to set the **Start** time (when night mode begins each day) and **End** time (when night mode ends each day), then tap **Done**.



- **Manual:** Manually select day mode or night mode. If using this option, select **Day** for day mode or **Night** for night mode.

4. Tap **Update** to save your changes.

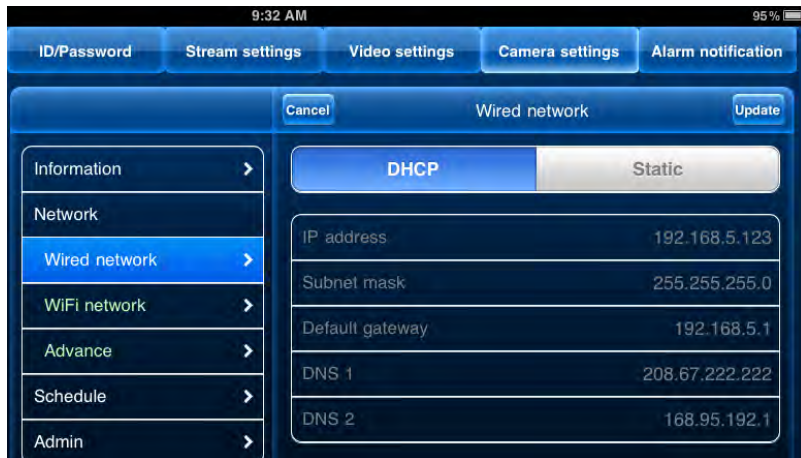
6.4.8 EDITING CAMERA WIRED NETWORK SETTINGS

Configure the camera IP address when connected using Ethernet. Select DHCP or Fixed IP.

To edit camera wired network settings:

1. In Camera List, tap  next to the camera you would like to edit.

2. Tap **Camera Settings**.
3. Tap **Network** then **Wired Network**.



— Select DHCP or Static

— If Static, configure IP address information

4. Select **DHCP** (recommended) to allow the camera to automatically obtain an IP address from the router or **Static** to use fixed IP address settings. If you select Static, configure your **IP Address**, **Subnet mask**, **Default gateway**, **DNS1**, and **DNS2**.
5. Tap **Update** to save your settings.

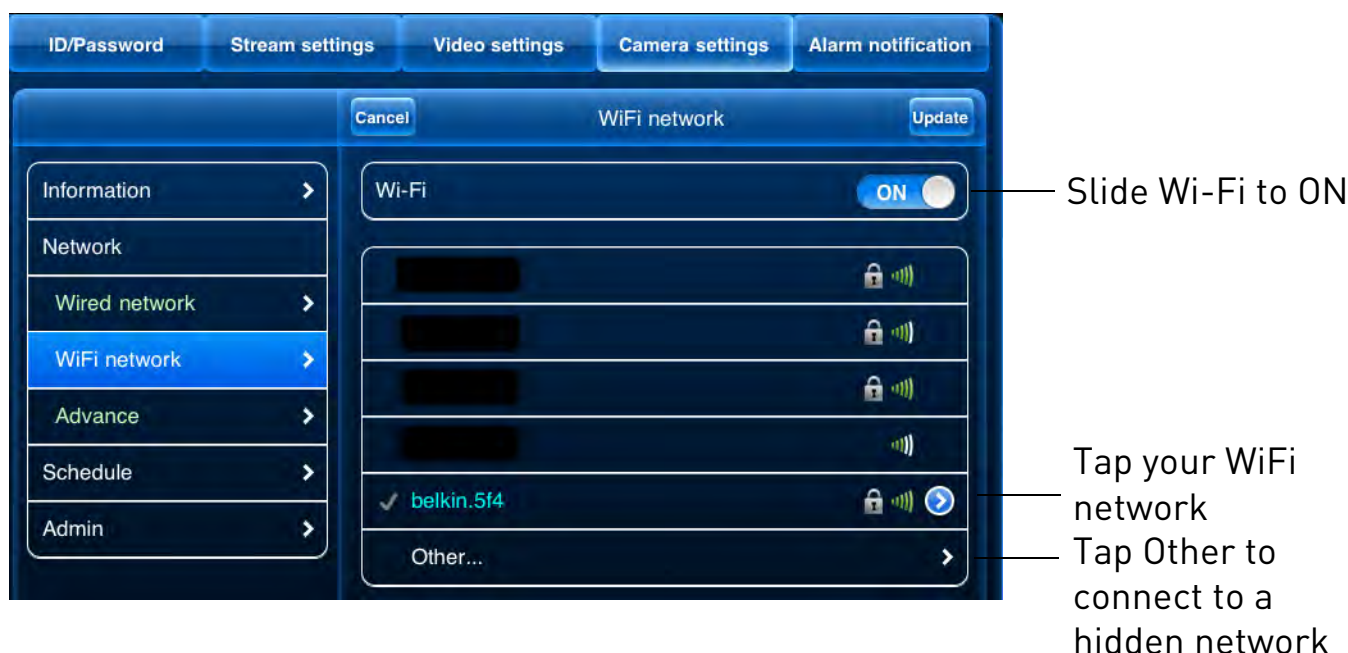
6.4.9 EDITING CAMERA WIFI NETWORK SETTINGS

Configure WiFi network settings for the camera. To setup the camera with a WiFi network, see “iPad WiFi Setup” on page 25.

To edit camera WiFi settings:

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.

3. Tap **Network** then **WiFi Network**.



4. Slide **WiFi** to **ON** to enable WiFi on the camera and scan for available networks.
5. Tap a WiFi network and enter the password to connect.
 - To connect to a hidden WiFi network, tap **Other**. Enter the SSID and select the security type and tap **Done**. Tap the network name from the list and enter the password.
6. Wait for the update to complete.
7. Remove the Ethernet cable from the camera. It will connect to the WiFi network. When it is connected, the blue Network LED will be on or flashing.
8. Tap  next to the camera to exit the edit camera screen.
9. Tap the camera in the Camera List to connect. If you cannot connect, check to make sure you have entered the correct wireless password and that the camera is in signal range of your wireless router.

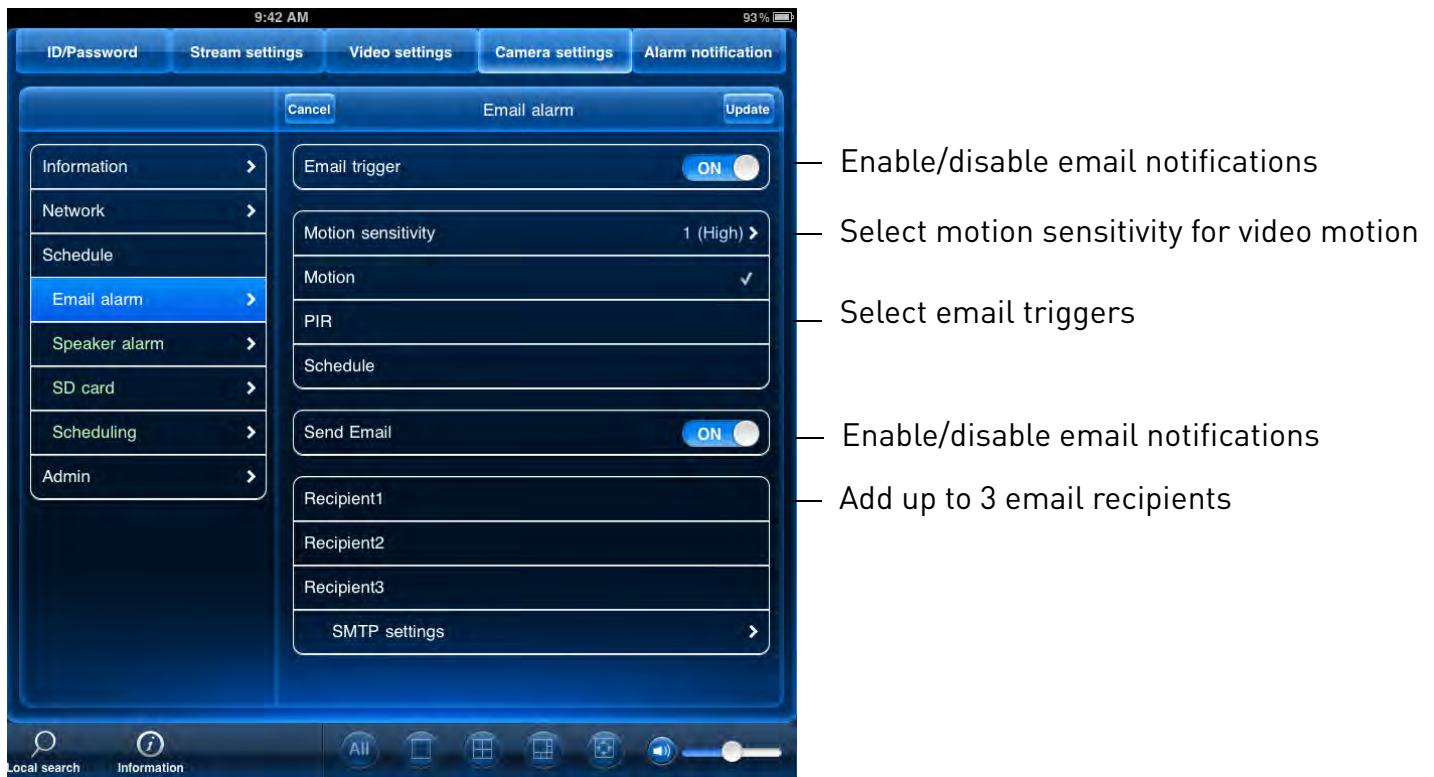
6.4.10 ENABLING EMAIL NOTIFICATIONS

Configure email alarms. The camera can be set up to send email alerts when motion is detected. Email alarms include a .jpg attachment.

To enable email notifications:

1. In Camera List, tap  next to the camera.

2. Tap **Camera Settings**.



3. Tap **Schedule** then **Email Alarm**.

4. Under **Email trigger**, select **ON** to enable email notifications or **OFF** to disable. Then under **Send Email**, select **ON** to enable email notifications.
5. Under **Motion sensitivity**, select the motion detection sensitivity between **1** (High) and **10** (Low). If Motion Detection Sensitivity is set to 1, motion detection will be triggered if a moving object is larger than 1% of the video area. If it is set to 10, a moving object must be larger than 10% of the video area to trigger motion detection. Tap Email alarm to return to the Email Alarm menu.

NOTE: This setting does not affect the PIR motion detector.

6. Check the following trigger options for email alarms:

- **Motion:** Use Video motion detection to trigger email alarms. Video motion detection looks for movement in the image to determine if there is motion. This means that there may be false alarms caused by changes in lighting, trees moving in the wind, etc.

- **PIR:** Use the PIR motion detector to trigger email alarms. The PIR motion detector uses changes in temperatures (e.g. from a person moving around in front of the camera) to determine if there is motion. PIR motion detection is less effective at higher temperatures.

NOTE: You may also select both PIR and Motion to receive alarms from both motion triggers.

- **Schedule:** Send email alarms based on the settings configured in the Scheduling menu.

7. Enter up to 3 email addresses under **Recipient1~3** that will receive email alarms.

8. Tap **Update** to save your changes.

NOTE: If you want to use a custom SMTP server to send Email messages, click **SMTP Settings**, enter your SMTP server information, and tap **OK**.

6.4.11 ENABLING SPEAKER ALARMS

Configure audio alarms using a speaker (not included) connected to the camera. Audio alarms can be set up to go off when the camera detects motion. This is helpful if you want to scare off intruders.

To configure speaker alarms:

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.
3. Tap **Schedule** then **Speaker Alarm**.



— Select speaker alarm triggers

— Select number of times speaker alarm will repeat

— Test speaker alarm

4. Under **Speaker Alarm Trigger**, check the triggers that will cause speaker alarms:
 - **Motion:** Use Video motion detection to trigger audio alarms. Video motion detection looks for movement in the image to determine if there is motion. This means that there may be false alarms caused by changes in lighting, trees moving in the wind, etc.
 - **PIR:** Use the PIR motion detector to trigger audio alarms. The PIR motion detector uses changes in temperatures (e.g. from a person moving around in front of the camera) to determine if there is motion. PIR motion detection is less effective at higher temperatures.
- NOTE:** You may also select both PIR and Motion to receive alarms from both motion triggers.
- **Schedule:** Create audio alarms based on the settings set in the Scheduling menu.
 - **Disable:** Disable speaker alarms.
5. Under **Alarm Loop Times**, select the number of times you would like the speaker alarm to repeat when alarms occur. Tap **Done**.
 6. Tap **Alarm Test** to sound a test alarm.
 7. Tap **Update** to save your settings.

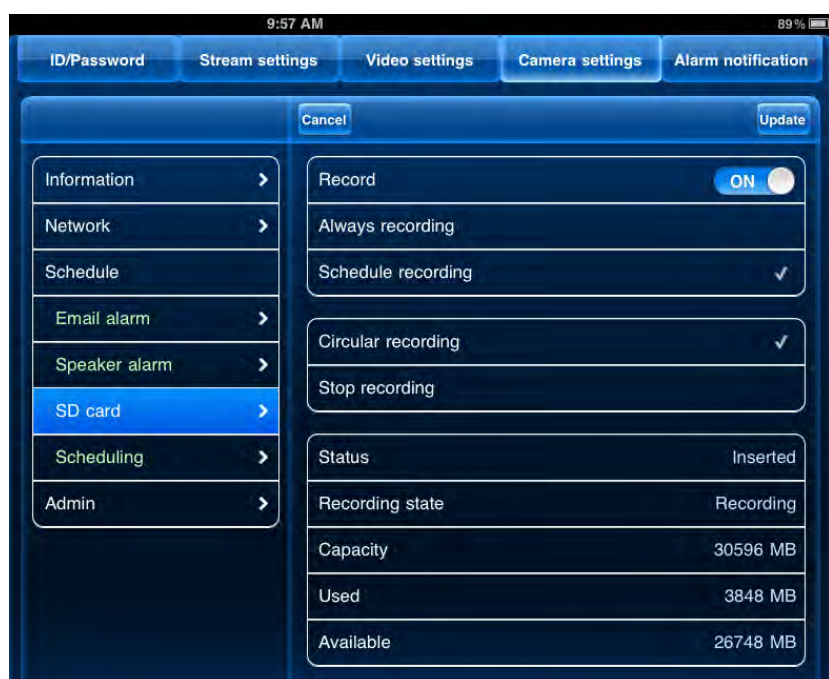
6.4.12 CONFIGURING MICROSD RECORDING

Configure video recording to the microSD card (required; not included). To playback recordings saved on the microSD card, use L-View or the iPhone, iPad, or Android apps.

To configure microSD card recording:

1. Make sure a microSD card (not included) is inserted into the camera. It is recommended to format the microSD card before using it with the camera.
2. In Camera List, tap  next to the camera you would like to edit.
3. Tap **Camera Settings**.

4. Tap **Schedule** then **SD-Card**.



Enable microSD recording

Select Always recording or Schedule recording

Select if you want the camera to overwrite (Circular recording) or stop recording when the microSD card is full

English

5. Under **Recording**, select **ON** to enable microSD recording or **OFF** to disable.

6. Check one of the following recording options:

- **Always Recording:** Camera will record continuously at all times.
- **Schedule Recording:** Camera will record according to settings set in the recording schedule.

NOTE: To enable Motion detection recording using iPad, you must use Schedule recording. Then, create a schedule in the Scheduling menu with Motion trigger, PIR trigger, or both Motion trigger and PIR trigger selected.

7. Check **Circular recording** to set the camera to overwrite the oldest recordings when the microSD card is full or select **Stop recording** to set the camera to stop recording when the microSD card is full.

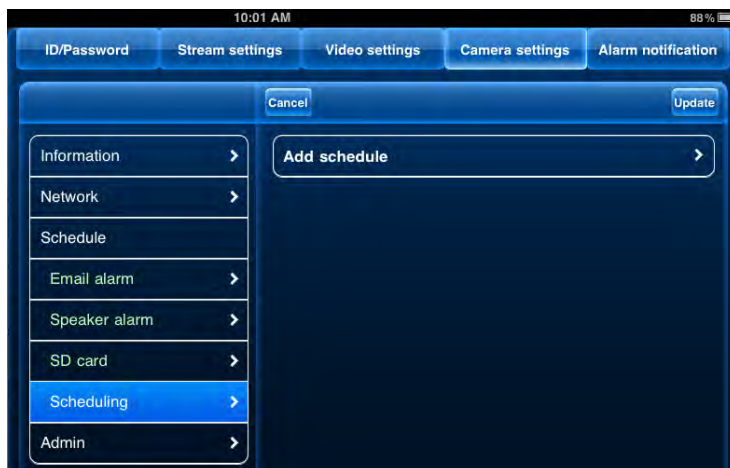
8. Tap **Update** to save your settings.

6.4.13 CONFIGURING THE CAMERA RECORDING AND ALARM SCHEDULE

Configure schedules for recording and alarms. Schedules can be configured separately for alarms and recording. You can configure up to 12 schedules.

To create a schedule for alarms or recording:

1. First, you must enable alarms or recording to use the schedule.
2. In Camera List, tap  next to the camera you would like to edit.
3. Tap **Camera Settings**.
4. Tap **Schedule** then **Scheduling**.
5. Tap **Add Schedule**.



6. Under **Email Alarm**, check **Motion trigger** to send an email alarm based on video motion, check **PIR trigger** to use the PIR motion sensor, or select both.
7. Under **Speaker Alarm**, check **Motion trigger** to create an audio alarm based on video motion, check **PIR trigger** to use the PIR motion sensor, or select both.
8. Under **SD card record**, check **Continuous** for the camera to record to microSD continuously during the scheduled time. Check **Motion trigger** to record when video motion is triggered during the scheduled time, select **PIR trigger** to record when the PIR motion sensor is triggered during the scheduled time, or select both.



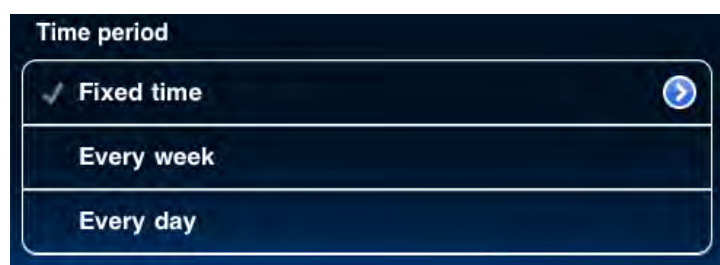
— Select triggers for email alarms

— Select triggers for speaker alarms

— Select triggers for microSD recording

9. Under **Time period**, select one of the following:

- **Every week:** Create a weekly recording schedule. Tap  and check the days you would like the schedule to apply to. Tap **Start** and **End** and use the sliders to configure the start and end time for the schedule. Tap **Done**.
- **Every day:** Create a daily recording schedule. Tap  then tap **Start** and **End** and use the sliders to configure the start and end time for the schedule. Tap **Done**.
- **Fixed time:** Create a one time schedule (for example, if you are going on vacation, and would like to record all the time). Tap  then set the **Start** and **End** using the sliders to configure the exact date and time when you would like the schedule to start and end. Tap **Done**.



———— Configure schedule times

10. Tap **Done** to save the schedule. Tap **Update** to save your settings.

To delete a Schedule:

1. From the Scheduling menu, swipe the schedule you would like to delete from left to right.
2. Tap **Delete**.
3. Tap **Update** to save your changes.

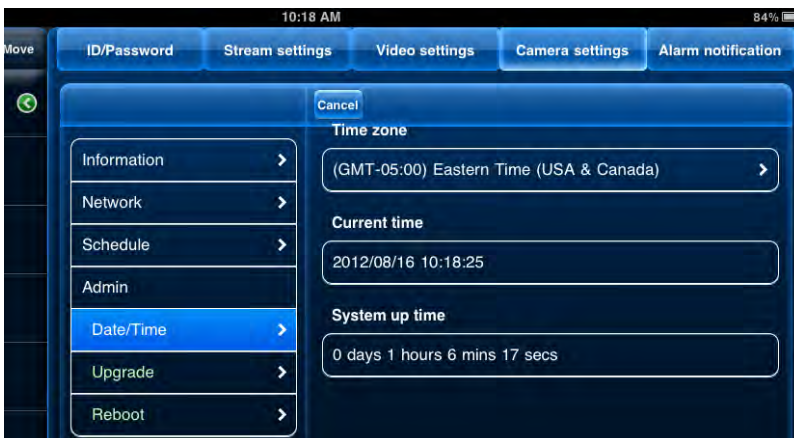
6.4.14 CONFIGURING THE CAMERA DATE AND TIME

Configure the camera date and time. The camera syncs with an Internet NTP time server to automatically provide the correct time, once you have configured your time zone and daylight savings time settings.

To set the camera date and time:

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.

3. Tap **Admin** then **Date/Time**.

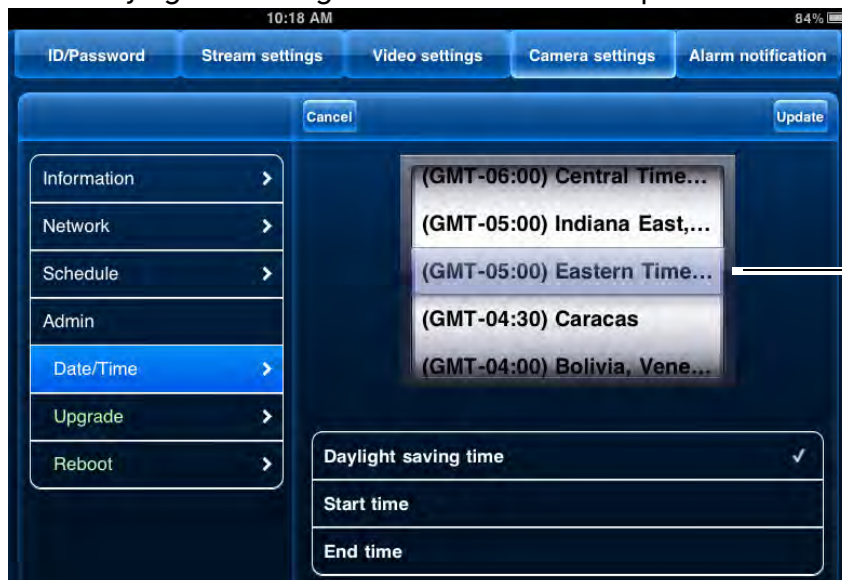


Tap Time Zone

4. Tap **Time Zone**.

5. Use the slider to select your time zone.

- If your region observes Daylight Savings Time, check **Daylight Savings Time**. Tap **Start Time** and **End Time**, use the sliders to configure the start and end time for Daylight Savings Time and then tap **Done**.



Select your Time Zone

Enable Daylight Savings and configure start and end times for daylight savings

6. Tap **Update** to save your changes. Tap **OK**. The camera will reboot to apply the new time zone.

6.4.15 REBOOTING THE CAMERA

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.
3. Tap **Admin** then **Reboot**.
4. Tap **OK** to confirm.

6.5 USING LOCAL SEARCH TO ADD CAMERAS

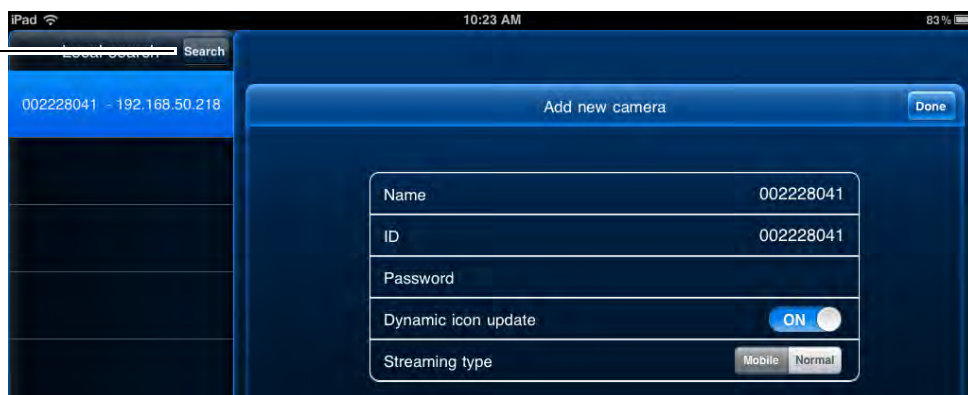
You can use the Local Search Menu to automatically add the ID's for cameras on your local network.

To add cameras using local search:

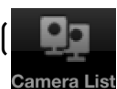
1. Tap the Local Search button ().
2. Lorex Ping automatically scans for cameras on your local network. Tap **Search** to re-scan.

Tap search to re-scan
your local network

Tap to add camera



3. Tap a camera from the list. The Add camera screen comes on with the camera ID already entered.
4. Enter a **Name** of your choice and enter the camera **Password**. If you have not connected to your camera before, the password is **lorex**.
5. Tap **Done**. The camera is now added to camera list. Tap the Camera List button



Camera List

7. ANDROID APP

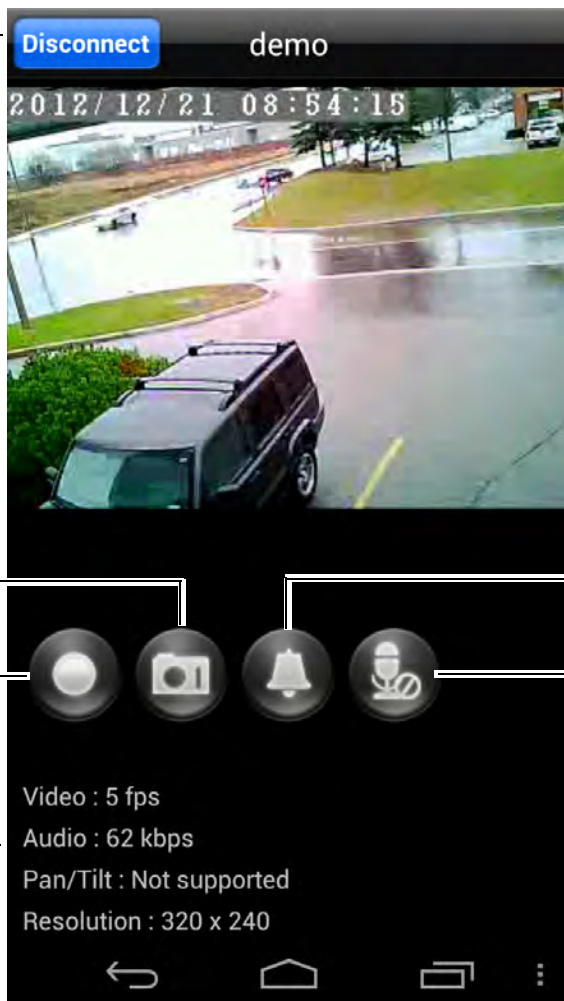
The app for Android is called **Lorex Ping**.

For instructions on connecting to your camera using Android, see “Connecting to your Camera on Android” on page 18.

7.1 LIVE VIEWING WITH LOREX PING FOR ANDROID

You can use Lorex Ping in portrait or landscape mode. Tilt the phone to switch between portrait or landscape.

Disconnect button (only shown in portrait mode)



Save a snapshot of the camera on your phone

Start/stop manual recording

Video information

Play an audio alarm on the camera (speaker required; not included)

Activate 2-way-audio (intercom) using the phone microphone (speaker required; not included)

7.1.1 USING 2-WAY AUDIO (INTERCOM)

1. Touch  to activate 2-way-audio (intercom) using the phone microphone (speaker required; not included).
2. Touch  again to turn off 2-way audio.

7.1.2 SAVING SNAPSHOTS

- Touch  to take a snapshot from the camera. Snapshots are saved in .png format to the *DCIM/Lorex Ping* folder on your device. To view or copy Snapshots to your computer, connect your device to your computer using a USB cable. See your Android device's Instruction Manual for details.

7.1.3 RECORDING VIDEO TO ANDROID

You can manually record video to the built-in memory on your Android device.

To record video to your Android device:

1. Press the record button () to begin recording.
2. Press the record button () again to stop recording. To view the recorded video, see below.

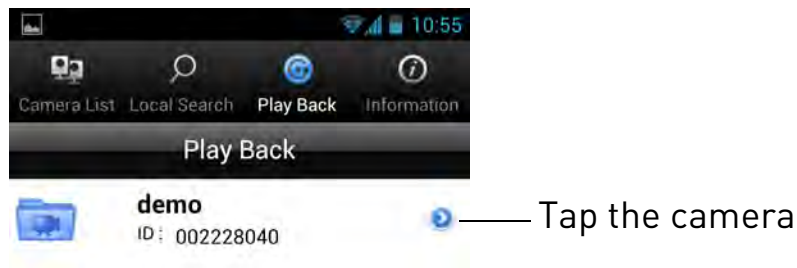
7.2 PLAYING BACK VIDEO RECORDED TO YOUR ANDROID DEVICE

After using the record button to manually record video to your Android device, you can use Lorex Ping to play it back.

To playback video recorded to your Android device:

1. From the Camera List, tap **Play Back** ().

2. Tap the camera you would like playback.



3. Select the date that you would like to playback video from, and then tap a video file to open it.



4. Use the on-screen controls to control playback.

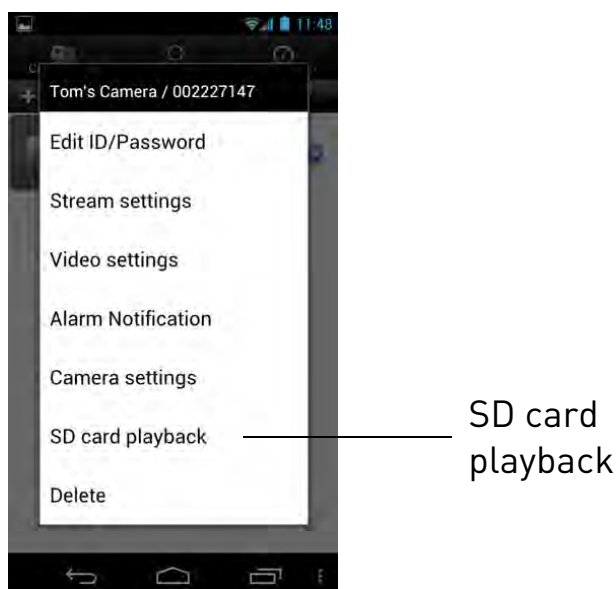


7.3 PLAYING BACK VIDEO RECORDED ON MICROSD ON ANDROID

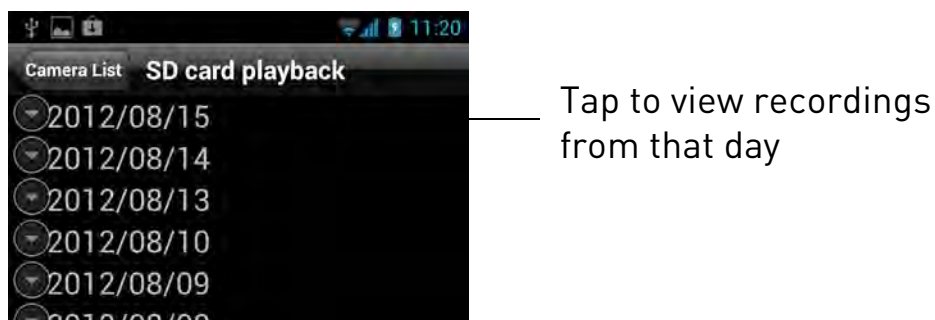
You can playback video recorded on the camera microSD card (not included) on your Android phone or tablet. For details on setting up microSD recording, see “Enabling microSD Recording” on page 128.

To play back video recorded on the camera microSD card:

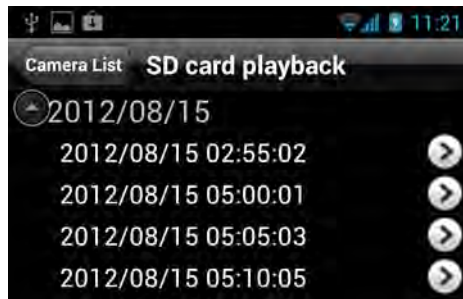
1. From the Camera List, tap .
2. Tap **SD card playback**.



3. The camera scans for available video files. Files are shown in a list according to the date they were recorded.



4. Tap a day to view recordings for that day. Tap a recording to view it.



Tap to view
a recording

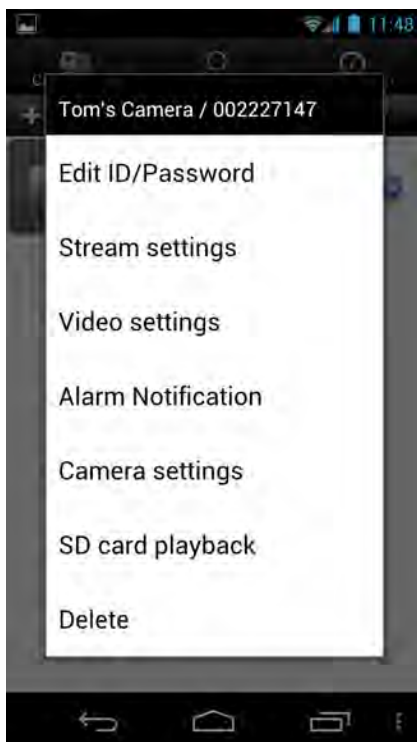
5. Tap **Disconnect** to return to the recording list.

7.4 USING CAMERA LIST TO EDIT CAMERA SETTINGS

You can use the Camera List to adjust the connection or other settings for your camera.

To access Camera Settings:

- Tap Camera List . Then tap  next to the camera you would like to edit. The Camera List Settings Menu appears.



NOTE: For certain menus, you will need to enter the camera admin user name and password before you may change settings. By default, the admin user name is **admin** and the password is **left blank**.

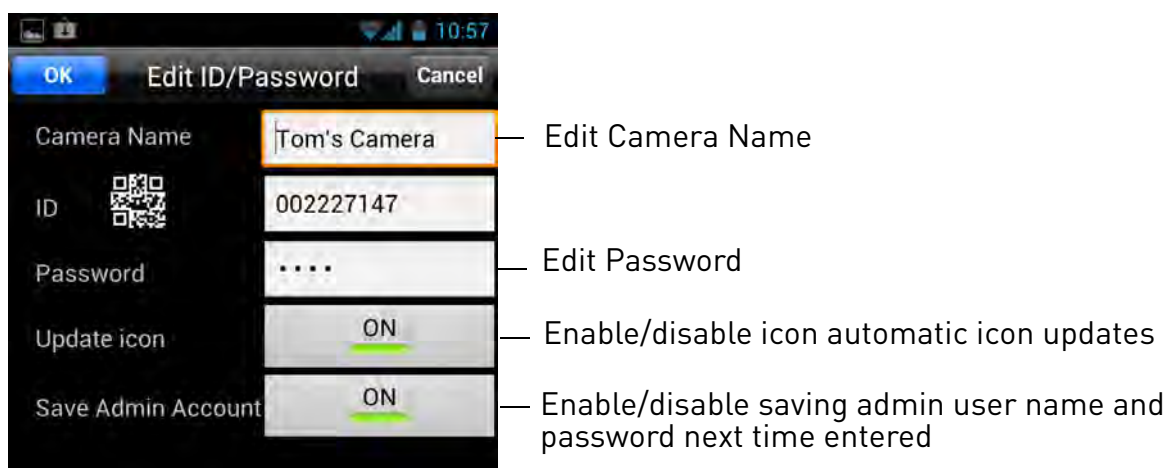
Camera List Settings Screen

7.4.1 EDITING CAMERA CONNECTION SETTINGS

You can edit your camera connection information. This is useful if you change the password of the camera or if you want to save the admin user name and password, so you don't have to enter it to make settings changes.

To edit camera connection settings:

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Edit ID/Password**.



3. Edit the **Camera Name** and **Password** as needed.
4. Under **Update icon**, select **ON** for the camera to update the icon shown in Camera List every time you connect to it or **OFF** for the icon to remain as is.
5. Under **Save Admin Account**, select **ON** to save the admin user name and password, so you do not have to enter it when making setting changes. Or, select **OFF** to not save the admin user name and password. The admin user name and password will be saved the next time you enter it to make a setting change.
6. Tap **OK** to save changes.

7.4.2 DELETING CAMERAS FROM CAMERA LIST

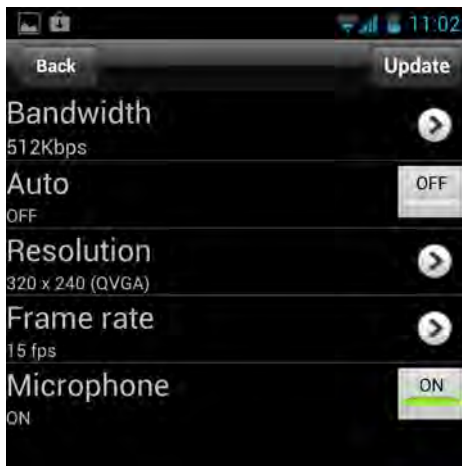
1. In Camera List, tap  next to the camera you would like to delete.
2. Tap **Delete**.

7.4.3 EDITING CAMERA MOBILE STREAMING SETTINGS

Configure the camera image quality settings for streaming to mobile devices (i.e. smart phones and tablets). Please note that less bandwidth is generally available over mobile networks than over WiFi or Ethernet.

To edit mobile streaming settings:

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Stream Settings**.



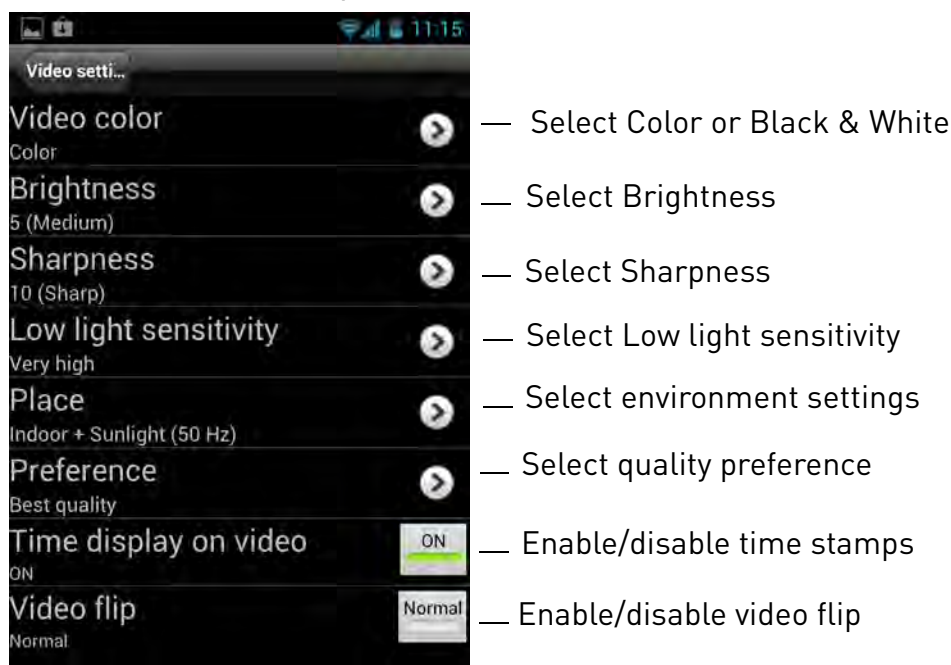
- Select Mobile Bandwidth
- Enable/disable auto resolution and frame rate adjustment
- Select Resolution
- Select Frame rate
- Enable/disable audio streaming to Android device

3. Under **Bandwidth**, select the bandwidth for your mobile connection. If you are mainly connecting using WiFi, you may set this setting higher.
4. Under **Auto**, tap to select **ON** to have the camera automatically select the resolution and frame rate based on available bandwidth. Or, select **OFF** to manually select the resolution and frame rate. If you select **OFF**, configure the following:
 - Under **Resolution**, select the resolution that will be used when connecting to the camera using a smart phone or tablet: **160x120 (Q2WGA)**, **320x240 (QVGA)**, or **640x480(VGA)**.
 - Under **Frame rate**, select the frame rate that will be used when connecting to the camera using a smart phone or tablet between **30fps** (highest) and **1fps** (lowest).
5. Under **Microphone**, tap to select **OFF** to turn off audio streaming to your mobile device or tap to select **ON** to turn on audio streaming to your mobile device.
6. Tap **Update** to save your settings.

7.4.4 EDITING CAMERA VIDEO SETTINGS

1. In Camera List, tap  next to the camera you would like to edit.

2. Tap **Video Settings**. Then tap **Video**.



3. Configure the following:

- **Video color:** Select **Color** to view the camera in color or select **Black & white**.
- **Brightness:** Manually adjust the brightness of the image between **10** (highest) and **1** (lowest).
- **Sharpness:** Manually adjust the sharpness of the image between **10** (highest) and **1** (lowest).
- **Low Light Sensitivity:** Set the camera's sensitivity in low light environments between **Very High** (highest), **High**, and **Normal** (lowest).
- **Place:** Select **Outdoor video** for well lit environments. Select **Indoor Video** if you notice strip lines in the image or if the picture is too dark on the Outdoor video setting. Select **Indoor video + sunlight** if the picture is too bright on the Indoor Video setting. If you select an indoor settings, select **60Hz light freq** or **50Hz light freq** to adjust the camera for the frequency of your indoor lighting.
- **Favor/Preference:** Select whether you would like the camera to reduce the image quality or the frame rate when bandwidth increases or decreases. Select **Video Motion** to have the camera maintain the frame rate and reduce image quality when bandwidth is insufficient. Select **Image Quality** to have the camera maintain image quality and reduce frame rate when bandwidth is insufficient. Select **Better Quality** to have the camera maintain frame rate and increase quality when bandwidth is sufficient. Select **Best Quality** to have the camera maintain the frame rate and increase quality to the maximum speed of the connection.

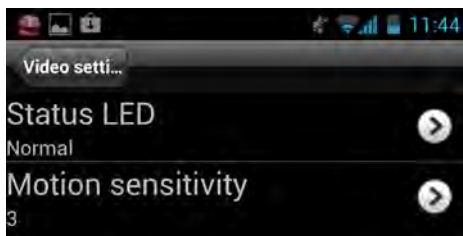
- **Time Display on Video:** Tap to select **ON** to enable time stamps on video or **OFF** to disable time stamps.
 - **Video flip:** Tap to select **Video Flip** to flip the camera image vertically and horizontally or select **Normal** for the normal orientation. This is useful if the camera has been mounted to a wall or ceiling upside down.
4. Tap **Video Settings** when finished making changes, then tap **Update** to save your settings.

7.4.5 CONFIGURING LED CONTROL AND MOTION DETECTION SENSITIVITY

Configure the behavior of the camera's status LED's. This is useful if you want the camera to be harder to spot at night. You can also configure the sensitivity for video motion detection.

To configure LED's and motion detection sensitivity:

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Video Settings**. Then tap **Control**.



— Select status LED behavior

— Select Video motion detection sensitivity

3. Under **Status LED**, select one of the following:
 - **Normal:** LED's will function as normal. For details on LED functions, see "Camera Overview" on page 1.
 - **Always turn off:** LED's are turned off at all times.
 - **Turn off after network connected:** LED's turn on when the camera is powered on and turn off once a network connection is made.
4. Under **Motion Sensitivity**, select the motion detection sensitivity between **1** (High) and **10** (Low). If Motion Detection Sensitivity is set to 1, motion detection will be triggered if a moving object is larger than 1% of the video area. If it is set to 10, a moving object must be larger than 10% of the video area to trigger motion detection.

NOTE: This setting does not affect the PIR motion detector.

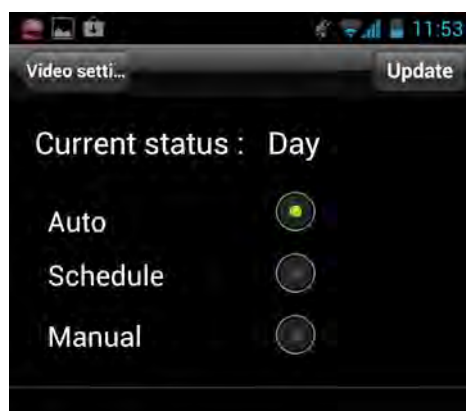
5. Tap **Video Settings** when finished making changes, then tap **Update** to save your settings.

7.4.6 CONFIGURING NIGHT MODE SETTINGS

Configure when the camera uses day or night mode. When day mode is on, the camera sees in color. When night mode is on, the camera sees in black and white, and the Infrared LED turns on to enable night vision.

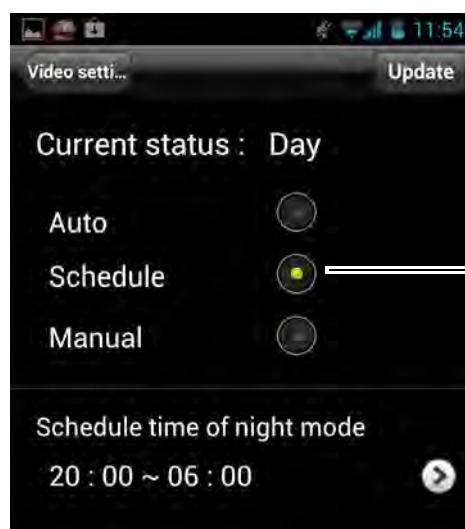
To configure Day/Night mode:

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Video Settings**. Then tap **Night Mode Control**.



— Select Night Mode control option

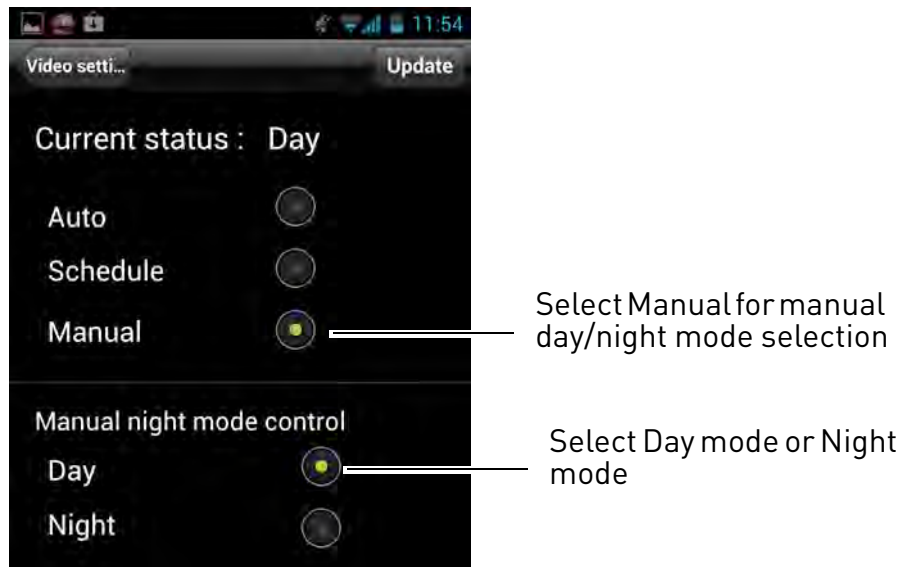
3. Select one of the following:
 - **Auto:** Camera will automatically switch between day mode or night mode, based on the amount of light in the room.
 - **Schedule:** Camera will switch between day mode and night mode at scheduled times each day. If using this option, tap under **Schedule time of night mode**, use the sliders to set the **Start** time (when night mode begins each day) and **End** time (when night mode ends each day), then tap **OK**.



Select Schedule to schedule day/night mode switch

Tap to configure day/night mode schedule.

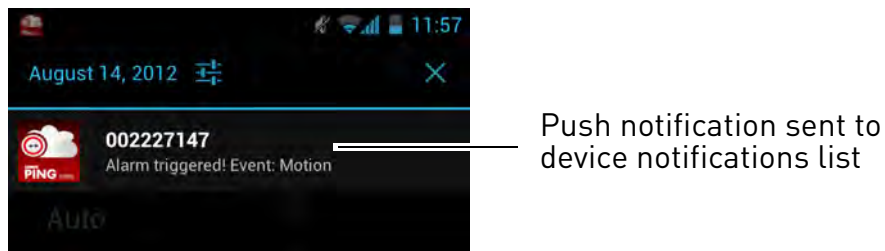
- **Manual:** Manually select day mode or night mode. If using this option, select **Day** for day mode or **Night** for night mode.



4. Tap **Update** to save your changes.

7.4.7 ENABLING PUSH ALARM NOTIFICATIONS

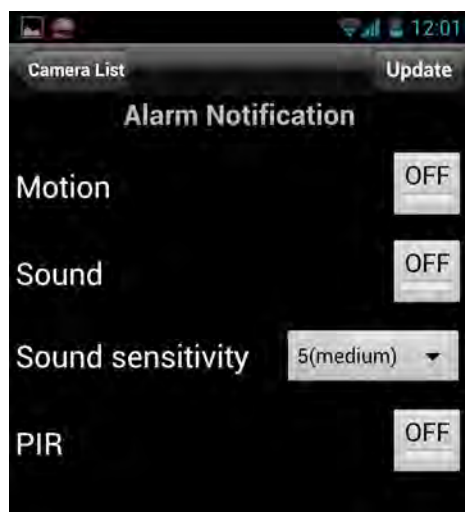
Push Alarm Notifications can be set up to create a notification straight to your Android device when motion or sound is detected by the camera. Push Alarm Notifications go directly to the notifications area on your device.



To enable Push Alarm Notifications:

1. In Camera List, tap  next to the camera you would like to edit.

2. Tap **Alarm Notification**.



Enable/disable push notifications for video motion detection

Enable/disable push notifications for sound

Select sensitivity for sound push notifications

Enable/disable push notifications for PIR motion detection

3. Under **Motion**, tap to select **ON** to enable Push Alarm Notifications when motion is detected using video motion detection or **OFF** to disable.
4. Under **PIR**, tap to select **ON** to enable Push Alarm Notifications when motion is detected using the PIR motion sensor or **OFF** to disable.
5. Under **Sound**, tap to select **ON** to enable Push Alarm Notifications when sound is detected by the camera or **OFF** to disable. Under **Sound Sensitivity**, select a sensitivity for Sound Push Alarm Notifications between **1** (lowest) and **10** (highest).
6. Tap **Update** to save your settings.

7.4.8 EDITING CAMERA WIRED NETWORK SETTINGS

Configure the camera IP address when connected using Ethernet. Select DHCP or Fixed IP.

To edit camera wired network settings:

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.

3. Tap **Network** then **Wired Network**.



Select DHCP (recommended) or Static for a fixed IP address
If Static, configure IP address information as needed

4. Select **DHCP** (recommended) to allow the camera to automatically obtain an IP address from the router or **Static** to use fixed IP address settings. If you select Static, configure your **IP Address**, **Subnet mask**, **Default gateway**, **DNS1**, and **DNS2**.
5. Tap **Update** to save your settings.

7.4.9 EDITING CAMERA WIFI NETWORK SETTINGS

Configure WiFi network settings for the camera. To setup the camera with a WiFi network, see “Android WiFi Setup” on page 26.

To edit camera WiFi settings:

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.

3. Tap **Network** then **WiFi Network**.



Check to enable WiFi

Tap the network you would like to connect to and enter the password

Tap Other to add a hidden WiFi network

4. Check WiFi to enable WiFi on the camera and scan for available networks.
5. Tap a WiFi network and enter the password to connect.
 - To connect to a hidden WiFi network, tap **Other**. Enter the **SSID**, select the security type, and tap **Add**. Tap the network name from the list and enter the password.
6. Wait for the update to complete.
7. Remove the Ethernet cable from the camera. It will connect to the WiFi network. When it is connected, the blue Network LED will be on or flashing.
8. Press **Camera Settings** then **Camera List** to exit the edit camera screen.
9. Tap the camera in the Camera List to connect. If you cannot connect, check to make sure you have entered the correct wireless password and that the camera is in signal range of your wireless router.

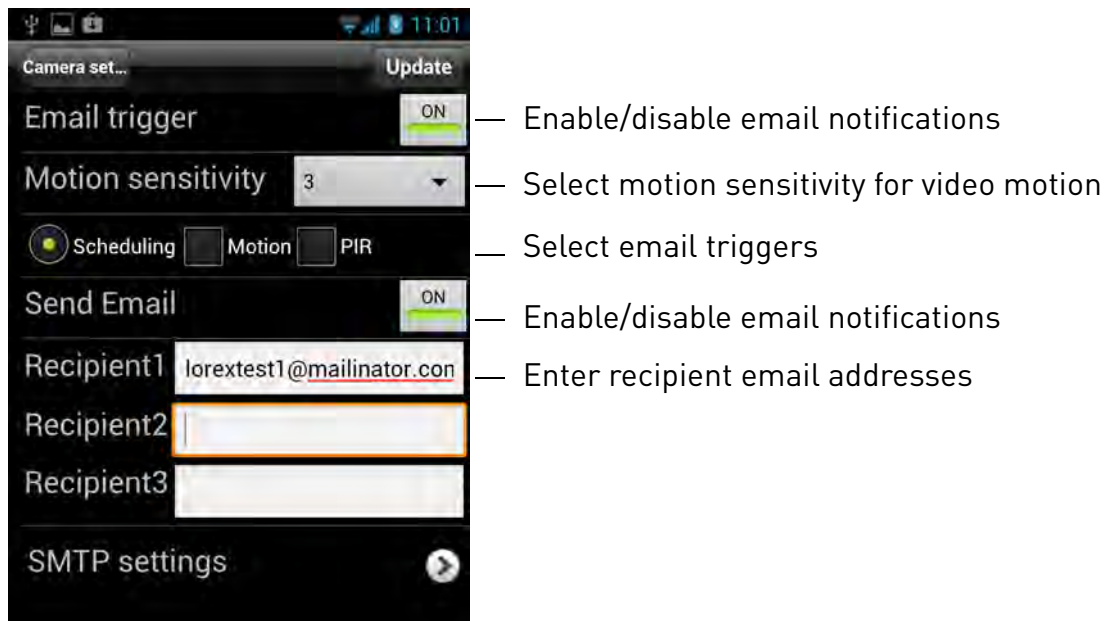
7.4.10 ENABLING EMAIL NOTIFICATIONS

Configure email alarms. The camera can be set up to send email alerts when motion is detected. Email alarms include a .jpg attachment.

To enable email notifications:

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.

3. Tap **Schedule** then **Email Alarm**.



4. Under **Email trigger**, tap to select **ON** to enable email notifications or **OFF** to disable. Then under **Send Email**, tap to select **ON** to enable email notifications.
5. Under **Motion sensitivity**, select the motion detection sensitivity between **1** (High) and **10** (Low). If Motion Detection Sensitivity is set to 1, motion detection will be triggered if a moving object is larger than 1% of the video area. If it is set to 10, a moving object must be larger than 10% of the video area to trigger motion detection.
- NOTE:** This setting does not affect the PIR motion detector.

6. Select from the following trigger options for email alarms:

- **Motion:** Use Video motion detection to trigger email alarms. Video motion detection looks for movement in the image to determine if there is motion. This means that there may be false alarms caused by changes in lighting, trees moving in the wind, etc.
- **PIR:** Use the PIR motion detector to trigger email alarms. The PIR motion detector uses changes in temperatures (e.g. from a person moving around in front of the camera) to determine if there is motion. PIR motion detection is less effective at higher temperatures.

NOTE: You may also select both PIR and Motion to receive alarms from both motion triggers.

- **Scheduling:** Send email alarms based on the settings configured under Schedule.

7. Enter up to 3 email addresses under **Recipient1~3** that will receive email alarms.
8. Tap **Update** to save your changes.

NOTE: If you want to use a custom SMTP server to send Email messages, click **SMTP Settings**, enter your SMTP server information, and tap **OK**.

7.4.11 ENABLING SPEAKER ALARMS

Configure audio alarms using a speaker (not included) connected to the camera. Audio alarms can be set up to go off when the camera detects motion. This is helpful if you want to scare off intruders.

To configure speaker alarms:

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.
3. Tap **Schedule** then **Speaker Alarm**.



Enable/disable speaker alarms

Select number of times speaker alarm will repeat

Select speaker alarm triggers

Test speaker alarm

4. Under **Speaker Alarm Trigger**, tap to select **ON** to enable speaker alarms or **OFF** to disable.
5. Under **Alarm Loop Times**, select the number of times you would like the speaker alarm to repeat when alarms occur.
6. Select from the following speaker alarm triggers:
 - **Motion:** Use Video motion detection to trigger audio alarms. Video motion detection looks for movement in the image to determine if there is motion. This means that there may be false alarms caused by changes in lighting, trees moving in the wind, etc.
 - **PIR:** Use the PIR motion detector to trigger audio alarms. The PIR motion detector uses changes in temperatures (e.g. from a person moving around in front of the camera) to determine if there is motion. PIR motion detection is less effective at higher temperatures.

NOTE: You may also select both PIR and Motion to receive alarms from both motion triggers.

- **Scheduling:** Create audio alarms based on the settings set in the Schedule.

7. Tap **Alarm Test** to sound a test alarm.
8. Tap **Update** to save your settings.

7.4.12 ENABLING MICROSD RECORDING

Configure video recording to the microSD card (required; not included). To playback recordings saved on the microSD card, use L-View or the iPhone, iPad, or Android apps.

To configure microSD card recording:

1. Make sure a microSD card (not included) is inserted into the camera. It is recommended to format the microSD card before using it with the camera.
2. In Camera List, tap  next to the camera you would like to edit.
3. Tap **Camera Settings**.
4. Tap **Schedule** then **SD-Card**.



Enable/disable microSD recording

Select always recording or schedule recording

Select Circular recording to overwrite oldest recordings when microSD card is full or Stop recording to stop recording when microSD card is full

5. Under **Recording**, tap to select **ON** to enable microSD recording or **OFF** to disable.
6. Select one of the following recording options:
 - **Always Recording:** Camera will record continuously at all times.

- **Schedule Recording:** Camera will record according to settings set in the recording schedule.

NOTE: To enable Motion detection recording using Android, you must use Schedule recording. Then, create a schedule in the Scheduling menu with **Motion trigger**, **PIR trigger**, or both Motion trigger and PIR trigger selected.

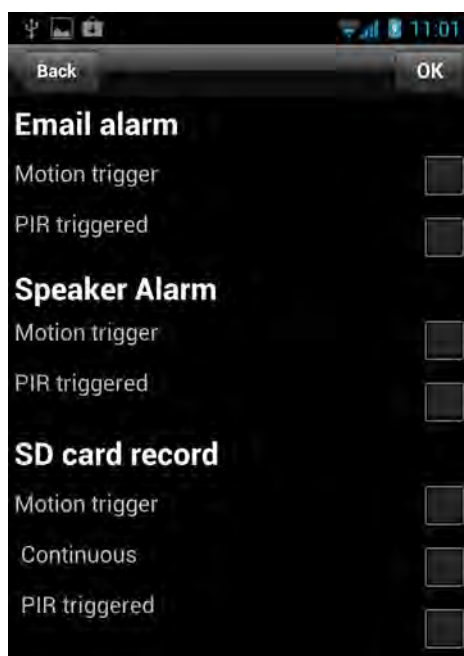
- Under **When disk space full**, select **Circular** recording to set the camera to overwrite the oldest recordings when the microSD card is full or select **Stop recording** to set the camera to stop recording when the microSD card is full.
- Tap **Update** to save your settings.

7.4.13 CONFIGURING THE RECORDING AND ALARM SCHEDULE

Configure schedules for recording and alarms. Schedules can be configured separately for alarms and recording. You can configure up to 12 schedules.

To create a schedule for alarms or recording:

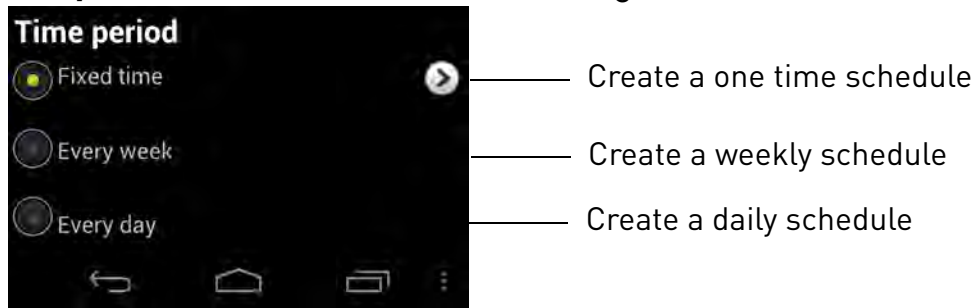
- First, you must enable alarms or recording to use the schedule.
- In Camera List, tap  next to the camera you would like to edit.
- Tap **Camera Settings**.
- Tap **Schedule** then **Scheduling**.
- Tap **Add Schedule**.



Select alarm and recording types for the schedule

- Under **Email Alarm**, check **Motion trigger** to send an email alarm based on video motion, select **PIR trigger** to use the PIR motion sensor, or select both.

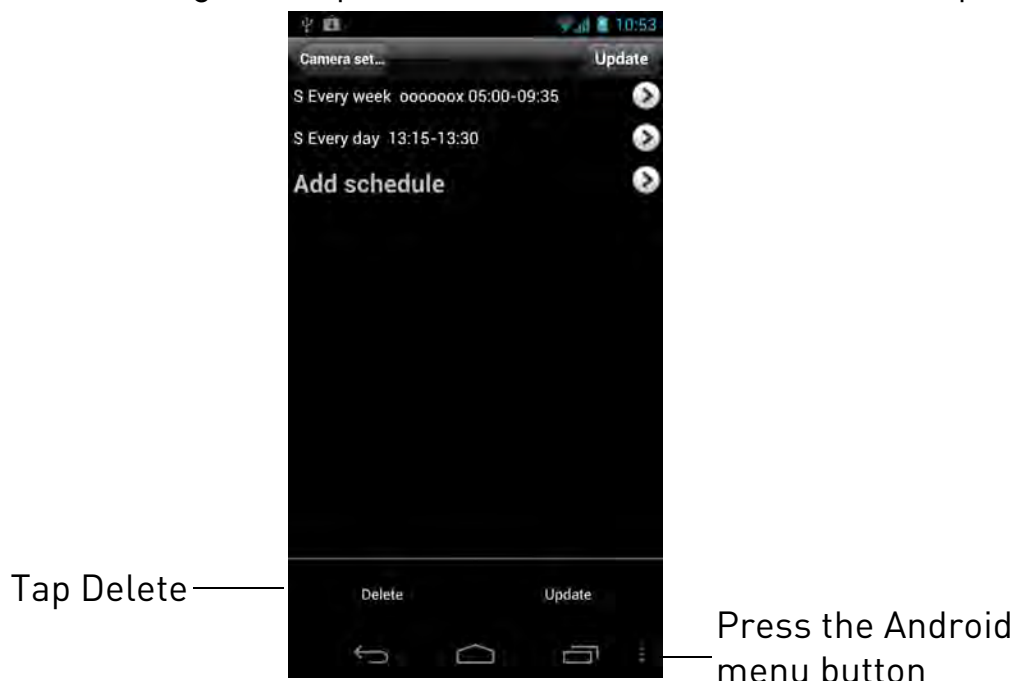
7. Under **Speaker Alarm**, check **Motion trigger** to create an audio alarm based on video motion, check **PIR trigger** to use the PIR motion sensor, or select both.
8. Under **SD card record**, check **Continuous** for the camera to record to microSD continuously during the scheduled time. Check **Motion trigger** to record when video motion is trigger during the scheduled time, select **PIR trigger** to record when the PIR motion sensor is triggered during the scheduled time, or select both.
9. Under **Time period**, select one of the following:



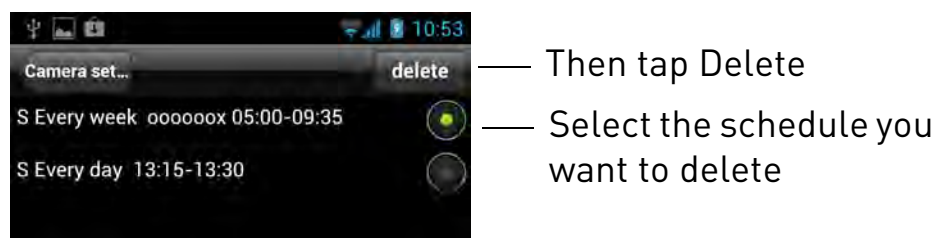
- **Every week:** Create a weekly recording schedule. Tap  and check the days you would like the schedule to apply to. Tap **Start** and **End** and use the sliders to configure the start and end time for the schedule. Tap **OK**.
 - **Every day:** Create a daily recording schedule. Tap  then tap **Start** and **End** and use the sliders to configure the start and end time for the schedule. Tap **OK**.
 - **Fixed time:** Create a one time schedule (for example, if you are going on vacation, and would like to record all the time). Tap **Start** and **End** and use the sliders to configure the exact date and time when you would like the schedule to start and end. Tap **OK**.
10. Tap **OK** to save the schedule. Tap **Update** to save your settings.

To delete a Schedule:

1. From the Scheduling menu, press the Android menu button and tap **Delete**.



2. Select the schedule you want to delete and tap **Delete**.



3. Tap **Update** to save your changes.

7.4.14 CONFIGURING THE CAMERA DATE AND TIME

Configure the camera date and time. The camera syncs with an Internet NTP time server to automatically provide the correct time, once you have configured your time zone and daylight savings time settings.

To set the camera date and time:

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.
3. Tap **Admin** then **Date/Time**.

4. Tap **Time Zone**.



Tap Time Zone

5. Use the slider to select your time zone.

6. If your region observes Daylight Savings Time, check **Daylight Savings Time**. Tap **Start Time** and **End Time**, use the sliders to configure the start and end time for Daylight Savings Time and then tap **OK**.



Select Time Zone

Check to enable Daylight Savings Time adjustments

Configure Start Time and End Time for Daylight Savings Time

7. Tap **Update** to save your changes.

7.4.15 REBOOTING THE CAMERA

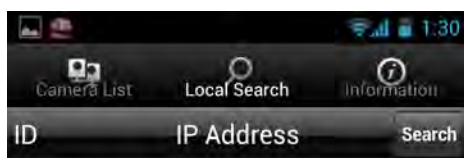
1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.
3. Tap **Admin** then **Reboot**.
4. Tap **OK** to confirm.

7.5 USING LOCAL SEARCH TO ADD CAMERAS

You can use the Local Search Menu to automatically add the ID's for cameras on your local network.

To add cameras using local search:

1. Tap the Local Search button ().



— Tap Search to re-scan your network

— Tap a camera to add the ID to your camera list

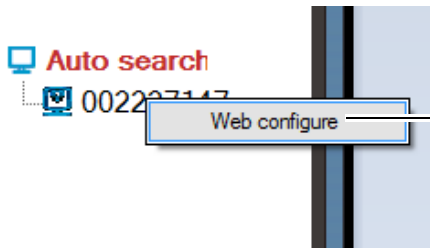
2. Lorex Ping automatically scans for cameras on your local network. Tap **Search** to re-scan.
3. Tap a camera from the list. The Add camera screen comes on with the camera ID already entered.
4. Enter a **Camera Name** of your choice and enter the camera **Password**. If you have not connected to your camera before, the password is **lorex**.
5. Tap **OK**. The camera is now added to camera list. Tap the camera name in camera list to connect to the camera.

8. CONFIGURING CAMERA SETTINGS USING A WEB BROWSER

Web Configure lets you modify camera settings using a web browser.

To access Web Configure:

1. Open L-View, right-click on the camera ID under Auto Search, and click **Web configure**.



Right-click the camera under Auto Search and click Web Configure

NOTE: Your computer must be on the same network as the camera to use Web Configure. You may change camera settings over the Internet using the iPhone, iPad, or Android apps.

2. Enter the camera admin user name and password. By default, the admin user name is **admin** and the admin password field is **left blank**. Click **Log in**. The Web Configure interface opens in your default web browser.

NOTE: Your camera admin user name and password differs from the password used to connect to your camera to view video.

8.1 WEB CONFIGURE OVERVIEW

IP CAM Information	
Model	wireless / v030306 / plus
IP CAM ID	002-227-147
Registration status	Registered(3)
Network type	Wired(DHCP) - (ip=192.168.50.182)
Video user	1
Video resolution	640 x 480
Video bandwidth	1.5M bps
Email/ftp Alarm	off
NAS Record	Not Recording
SD-Card Record	Not Recording
Mac Address(Hex)	00:1B:C7:01:E2:92
WiFi Mac Address(Hex)	00:1B:C7:FF:FF:37

1. **Information:** View information about the camera and camera settings.
2. **Network:** Configure wired/wireless network settings. Connect to a wireless network.
3. **Video:** Configure camera video and streaming settings. Watch live video from the camera (Internet Explorer only).
4. **Schedule:** Configure recording settings and schedules. Configure email and audio alarms (speaker required; not included).
5. **Admin:** Configure the camera date and time, passwords, and LED's. Restart the camera. Perform system upgrades.
6. **Language:** Select the language for the Web Configure interface.

8.2 NETWORK

Configure networking settings for WiFi or Ethernet connection.

8.2.1 WIRED NETWORK (DHCP OR FIXED IP)

Configure the camera IP address when connected using Ethernet. Select DHCP or Fixed IP.

Network Settings(For wired ethernet)							
☐ Obtain an IP address automatically							
☒ Use the following IP address							
IP address	192	.	168	.	5	.	123
Subnet mask	255	.	255	.	255	.	0
Default gateway	192	.	168	.	5	.	1
☐ Obtain DNS server address automatically							
☒ Use the following DNS server address							
Preferred DNS server	208	.	67	.	222	.	222
Alternate DNS server	168	.	95	.	192	.	1
Save & Apply							

To configure the camera to use DHCP or fixed IP:

1. Select one of the following:
 - **Obtain an IP address automatically (recommended):** Use DHCP and allow the camera to obtain an IP address from the router automatically.
 - **Use the following IP address:** Use a fixed IP address and manually enter the IP address information.
2. If you selected Use the following IP address, configure the following:
 - **IP address:** Enter the IP address the camera will use. Make sure it is available on your network.
 - **Subnet mask:** Enter the Subnet Mask.
 - **Default Gateway:** Enter the Default Gateway address.
 - **Obtain DNS server address automatically:** Select to have the camera automatically select a DNS server.

- **Use the following DNS server address:** Select and then manually enter DNS server information.

3. Click **Save & Apply**.

8.2.2 WIFI SECURITY (CONFIGURING WIFI SETTINGS)

Configure the camera to connect to a WiFi network and configure WiFi settings.

To configure WiFi Settings:

NOTE: For instructions on connecting your camera to a WiFi network, see “WiFi Setup” on page 21.

1. Perform one of the following:

WiFi Security Settings

☒ Enable WiFi function ☐ Disable WiFi function

SSID: belkin.5f4

Security mode: ☐ None ☐ WEP ☒ WPA(2)-PSK(WPA personal)

WEP Encryption: 64 bits(10 hex digits)

WEP Key: 1234567890

WPA Encryption: TKIP

WPA-PSK Key:

Buttons: Save & Apply, IP address, WiFi test, WiFi Scan

Labels below buttons: Configure WiFi IP address, Test WiFi configuration, Scan WiFi networks

- To Scan available WiFi networks, click **WiFi Scan**.
- To connect to a hidden WiFi network, select **Enable Wifi function**, and manually fill out the **SSID**, **Security mode** (i.e. encryption type), and the **WEP** or **WPA-PSK Key**. Click **Save & Apply**. Refresh the page and select **WiFi test**. When the test is successful, disconnect the camera from Ethernet.
- To configure a fixed IP address for the camera when connected over WiFi, click **IP address**, configure the settings as needed, and click **Save & Apply**.
- To test configured WiFi settings, click **WiFi test**.

8.3 VIDEO

Configure camera video and streaming settings. Watch live video from the camera (Internet Explorer only).

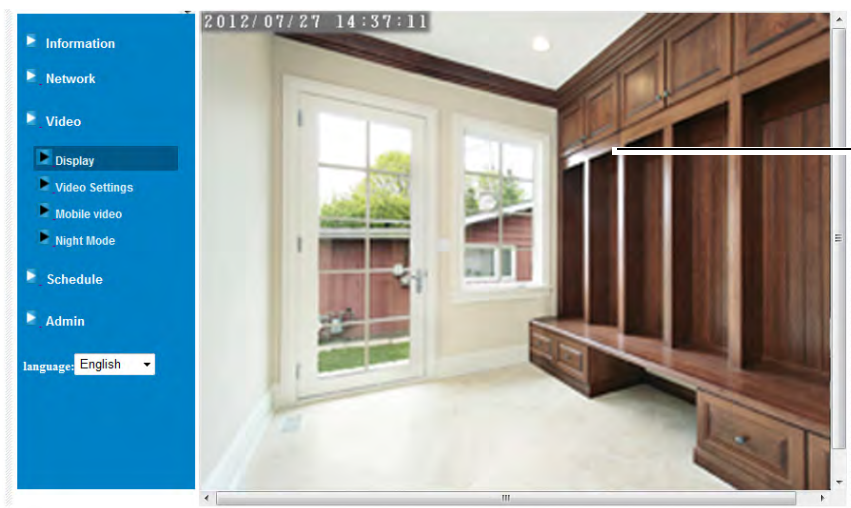
8.3.1 DISPLAY

Watch live video from the camera.

NOTE: Viewing live video using a web browser is only compatible with Internet Explorer on PC only.

You must install ActiveX controls to view live video using Internet Explorer. An attention bar will appear to prompt you to install ActiveX controls. Click **Install** or click inside the attention bar and select **Install ActiveX for all users on this computer** and follow the prompts to install ActiveX controls.

Once ActiveX controls are installed, you can view live video from the camera. Double-click inside the video area to open the video in full-screen. Double-click again to exit full screen.



Double-click inside the video area for full-screen

8.3.2 VIDEO SETTINGS

Adjust the video quality settings. Set the password to access camera video through L-View or apps.

To set the camera password for accessing video through L-View or apps:

1. **Under Password (play video)**, enter a password to access the camera video using L-View or smart phone and tablet apps.
2. Click **Save & Apply** to save the new password.

To configure camera video quality settings:

TIP: Change only one camera image quality setting at a time before clicking **Save & Apply** so you can judge the effects.

1. Configure the following, as needed:
 - **Internet speed:** Select the speed of your Internet connection. If your Internet connection is faster than 1.5Mbps, select 1.5Mbps.
 - **Adjust resolution and frame rate automatically:** Select to allow the camera to adjust the video resolution and frame rate based on available bandwidth.

- **Use the following values:** Select to manually select the video resolution and frame rate for the camera. Note that the image quality may decrease if there is not enough bandwidth for your selected settings.
- **Resolution:** Manually select either **VGA** (640x480) or **QVGA** (320x240) resolution. VGA resolution will give you a better, more detailed picture, but requires more bandwidth. QVGA allows the camera to maintain a higher frame rate when available bandwidth is low.
- **Frame rate:** Manually select the frame rate between **30fps** (highest) and **1fps** (lowest). 30fps is real time video, meaning that movement in the image will appear smooth, with no choppiness.
- **Favor/Preference:** Select whether you would like the camera to reduce the image quality or the frame rate when bandwidth increases or decreases. Select **Video Motion** to have the camera maintain the frame rate and reduce image quality when bandwidth is insufficient. Select **Image Quality** to have the camera maintain image quality and reduce frame rate when bandwidth is insufficient. Select **Better Quality** to have the camera maintain frame rate and increase quality when bandwidth is sufficient. Select **Best Quality** to have the camera maintain the frame rate and increase quality to the maximum speed of the connection.
- **Brightness:** Manually adjust the brightness of the image between **10** (highest) and **1** (lowest).
- **Sharpness:** Manually adjust the sharpness of the image between **10** (highest) and **1** (lowest).
- **Low Light Sensitivity:** Set the camera's sensitivity in low light environments between **Very High** (highest), **High**, and **Normal** (lowest).
- **Video color:** Select **Colored** to view the camera in color or select **Black & white**.
- **Video flip:** Select **Video Flip** to flip the camera image vertically and horizontally or select **Normal** for the normal orientation. This is useful if the camera has been mounted to a wall or ceiling upside down.
- **Outdoor video/Indoor video/Indoor video + sun light:** Select **Outdoor video** for well lit environments. Select **Indoor Video** if you notice strip lines in the image or if the picture is too dark on the Outdoor video setting. Select **Indoor video + sunlight** if the picture is too bright on the Indoor Video setting.
- **60Hz light freq/50Hz light freq:** If necessary, select **60Hz light freq** or **50Hz light freq** to adjust the camera for the frequency of your indoor lighting. These settings are not available when the camera is set to Outdoor video.

- **Enable audio microphone/Disable audio microphone:** Select **Disable audio microphone** to disable the built-in microphone in the camera or select **Enable audio microphone** to enable it.
 - **Enable time display/Disable time display:** Select **Disable time display** to turn off video time stamps or **Enable time display** to turn on video time stamps.
2. Click **Save & Apply** to apply the settings to the camera. You may need to reconnect to the camera after making settings changes.

8.3.3 MOBILE VIDEO

Set streaming settings for connecting using a smart phone or tablet. Note that less bandwidth is generally available when connecting to the camera over a mobile cellular network than when connecting using broadband Internet.

To configure mobile streaming settings:

1. Under **Mobile bandwidth**, select your available mobile bandwidth. If you are primarily connecting using WiFi, you may set this setting higher.
2. Select either **Select resolution & frame rate automatically** to have the camera automatically select the resolution and frame rate based on available bandwidth or select **Use the following values** to manually select the resolution and frame rate.
3. Under **Resolution**, select the resolution that will be used when connecting to the camera using a smart phone or tablet: **VGA** (640x480) or **QVGA** (320x240).

4. Under **Frame rate**, select the frame rate that will be used when connecting to the camera using a smart phone or tablet between **30fps** (highest) and **1fps** (lowest).
5. Select **Enable audio** to enable audio streaming to smart phones and tablets or **Disable audio** to disable audio streaming to smart phones and tablets.
6. Click **Save & Apply** to apply changes to your camera.

8.3.4 NIGHT MODE

Configure when the camera uses day or night mode. When day mode is on, the camera sees in color. When night mode is on, the camera sees in black and white, and the Infrared LED turns on to enable night vision.

The screenshot shows a web interface for 'Night Mode Control'. On the left is a blue sidebar menu with options: Information, Network, Video, Display, Video Settings, Mobile video, Night Mode (highlighted), Schedule, and Admin. At the bottom of the sidebar is a 'Language' dropdown set to 'English'. The main content area has a title bar 'Night Mode Control'. Below it are three radio button options: 'Automatic day and night mode switch' (selected), 'Scheduled time of night mode', and 'Manual night mode control'. Under 'Scheduled time of night mode', there is a 'During time' section with two time pickers: the first is set to 22:00 and the second to 6:00, separated by a tilde (~). Under 'Manual night mode control', there is a 'Mode' dropdown set to 'Day'. Below these is a 'Current Status' section showing 'Day'. At the bottom right of the main area is a 'Save & Apply' button.

To configure Day/Night mode:

1. Select one of the following:
 - **Automatic day and night mode switch:** Camera will automatically switch between day mode or night mode, based on the amount of light in the room.
 - **Scheduled time of night mode:** Camera will switch between day mode and night mode at a scheduled times each day. If using this option, use the first set of drop-down menus to select (in 24-hour time) what time the camera will switch to night mode

and the second set of drop-down menus to select when the camera will return to day mode.

☒ Scheduled time of night mode

During time 20 : 0 ~ 6 : 0

Start of night mode (8:00 PM) Return to day mode (6:00 AM)

- **Manual night mode control:** Manually select day mode or night mode. If using this option, under Mode, select **Day** for day mode or **Night** for night mode.

☒ Manual night mode control

Mode Night

Select day or night mode

2. Click **Save & Apply** to apply your settings to the camera.

8.4 SCHEDULE

Configure recording to microSD card, configure email or speaker alarms, and setup the recording/alarm schedule.

8.4.1 EMAIL/FTP ALARM SETTINGS (CONFIGURING EMAIL ALARMS)

Configure email alarms. The camera can be set up to send email alerts when motion is detected. Email alarms include a .jpg attachment.

The screenshot shows the 'Email/FTP Alarm Settings' web interface. On the left is a blue sidebar with a menu: Information, Network, Video, Schedule (selected), Email/ftp Alarm (selected), Speaker Alarm, NAS Settings, SD-Card, Scheduling, Admin, and a language dropdown set to English. The main content area has a title bar 'Email/FTP Alarm Settings'. Below it are several settings sections. The first section, 'Email/FTP Trigger', has radio buttons for Motion (selected), PIR, Schedule, and Disable. Below this are 'Motion sensitivity' (a dropdown menu showing '3') and 'Trigger Interval' (a text input showing '100' with 'seconds(1~600)' to its right). The second section, 'Send Email message', has a checked checkbox. Below this are three text input fields for 'Email recipient#1', 'Email recipient#2', and 'Email recipient#3'. The third section, 'Send FTP message', has an unchecked checkbox. Below this are text input fields for 'FTP Server', 'Username', 'Password', and 'Remote folder'. At the bottom are two buttons: 'Save & Apply' and 'Advanced'. Annotations with lines pointing to specific elements are present: 'Configure Triggers' points to the trigger radio buttons; 'Check Send Email message' points to the 'Send Email message' checkbox; 'Enter up to 3 email recipients' points to the three email recipient input fields; and 'Click Save & Apply' points to the 'Save & Apply' button.

Email/FTP Alarm Settings	
Email/FTP Trigger	☒ Motion ☐ PIR ☐ Schedule ☐ Disable
Motion sensitivity	3
Trigger Interval	100 seconds(1~600)
☒ Send Email message	
Email recipient#1	
Email recipient#2	
Email recipient#3	
☐ Send FTP message	
FTP Server	
Username	
Password	
Remote folder	
Save & Apply Advanced	

To configure Email Alarms:

1. Under **Email/FTP Trigger**, select one of the following alarm triggers:
 - **Motion:** Use Video motion detection to trigger email alarms. Video motion detection looks for movement in the image to determine if there is motion. This means that there may be false alarms caused by changes in lighting, trees moving in the wind, etc.
 - **PIR:** Use the PIR motion detector to trigger email alarms. The PIR motion detector uses changes in temperatures (e.g. from a person moving around in front of the camera) to determine if there is motion. PIR motion detection is less effective at higher temperatures.

NOTE: You may also select both PIR and Motion to receive alarms from both motion triggers.

- **Schedule:** Send email alarms based on the settings configured under Schedule. see “Scheduling (Configuring Recording and Alarm Schedules)” on page 148.

- **Disable:** Disable email alarms.

2. If you have selected Motion, under Motion Sensitivity, select the motion detection sensitivity between **1** (High) and **10** (Low). If Motion Detection Sensitivity is set to 1, motion detection will be triggered if a moving object is larger than 1% of the video area. If it is set to 10, a moving object must be larger than 10% of the video area to trigger motion detection.

NOTE: This setting does not affect the PIR motion detector.

3. Under **Trigger Interval**, enter the minimum time (in seconds) the camera will wait in between email alarms. If this Interval is set too low, you may receive a lot of messages.
4. Under **Email Recipient**, enter up to 3 email addresses that will receive email alarms.
5. Click **Save & Apply** to save email alarm settings.

NOTE: If you want to use a custom SMTP server to send Email messages, click Advanced, enter your SMTP server information, and click Save & Apply.

8.4.2 SPEAKER ALARM (CONFIGURING AUDIO ALARMS)

Configure audio alarms using a speaker (not included) connected to the camera. Audio alarms can be set up to go off when the camera detects motion. This is helpful if you want to scare off intruders.

Information

Network

Video

Schedule

Email/ftp Alarm

Speaker Alarm

NAS Settings

SD-Card

Scheduling

Admin

language: English

Speaker Alarm Settings

Speaker Alarm Trigger: ☐ Motion ☐ PIR ☐ Schedule ☒ Disable

Alarm loop times: 1

Save & Apply

Alarm Test

Select Audio Alarm Triggers

Select the Alarm loop times

To configure speaker alarms:

1. Under **Speaker Alarm Trigger**, select one of the following alarm triggers:
 - **Motion:** Use Video motion detection to trigger audio alarms. Video motion detection looks for movement in the image to determine if there is motion. This means that there may be false alarms caused by changes in lighting, trees moving in the wind, etc.
 - **PIR:** Use the PIR motion detector to trigger audio alarms. The PIR motion detector uses changes in temperatures (e.g. from a person moving around in front of the camera) to determine if there is motion. PIR motion detection is less effective at higher temperatures.

NOTE: You may also select both PIR and Motion to receive alarms from both motion triggers.

- **Schedule:** Create audio alarms based on the settings set in the Schedule. see “Scheduling (Configuring Recording and Alarm Schedules)” on page 148.
 - **Disable:** Disable audio alarms.
2. Under **Alarm loop times**, select the number of times the alarm will repeat.
 3. Click **Alarm Test** to sound a test alarm.
 4. Click **Save & Apply**.

8.4.3 SD CARD (CONFIGURING MICROSD RECORDING)

Configure video recording to the microSD card (required; not included). To playback recordings saved on the microSD card, use L-View or the iPhone, iPad, or Android apps.

Select Recording option

Select overwrite or stop recording when the microSD card is full

English

To configure microSD card recording:

1. Make sure a microSD card (not included) is inserted into the camera. It is recommended to format the microSD card before using it with the camera.
2. Select one of the following recording options:
 - **Always Recording:** Record continuously, all the time to microSD card.
 - **Schedule Recording:** Record according to the settings set in the Schedule.
 - **Disable Recording:** Do not record.
3. Under **When disk space full**, select **Overwrite** for the camera to record over the oldest recordings when the microSD card is full or select **Stop recording** for the camera to stop recording when the microSD card is full.
4. Click **Save & Apply**.

8.4.4 SCHEDULING (CONFIGURING RECORDING AND ALARM SCHEDULES)

Configure schedules for recording and alarms. Schedules can be configured separately for alarms and recording. You can configure up to 12 schedules.

Schedule Management

☐ Email/ftp Alarm	☐ Motion triggered ☐ PIR triggered	
☐ Speaker Alarm	☐ Motion triggered ☐ PIR triggered	
☐ NAS Record	Nas schedule not enabled	
☐ SD-Card Record	☐ Continuous ☐ Motion triggered ☐ PIR triggered	
☐ Every week	☐ Sun ☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat	
☐ Every day	During time: 00 : 00 ~ 00 : 00	
☒ Fixed time	Start time: 2012 / 08 / 13 13 : 00 End time: 2012 / 08 / 13 13 : 00	

[Add Schedule](#)

To create a schedule for alarms or recording:

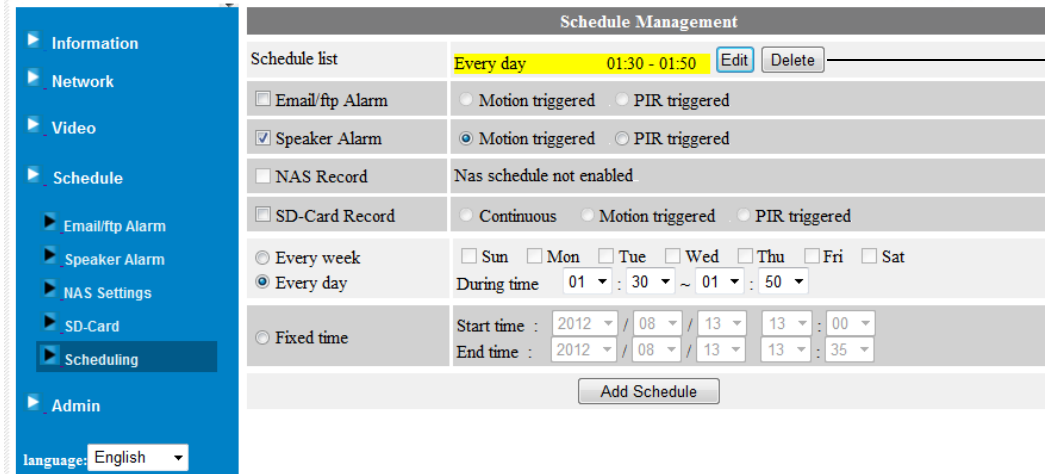
- First, you must enable alarms or recording to use the schedule.
- Check which alarm or recording types will use this schedule:
 - **Email/ftp Alarm:** Check to use this schedule for Email Alarms. Select **Motion triggered** to send an email alarm based on video motion, select **PIR triggered** to use the PIR motion sensor, or select both.
 - **Speaker Alarm:** Check to use this schedule for Email Alarms. Select **Motion triggered** to create an audio alarm based on video motion, select **PIR triggered** to use the PIR motion sensor, or select both.
 - **SD Card Recording:** Check to use this schedule for microSD recording. Select **Continuous** for the camera to record to microSD continuously during the scheduled time. Select **Motion triggered** to record when video motion is triggered during the scheduled time, select **PIR triggered** to record when the PIR motion sensor is triggered during the scheduled time, or select both.
- Select one of the following to configure the times that will be used for this schedule:
 - **Every week:** Create a weekly recording schedule. Check the days you would like the schedule to apply to. Under **During time**, enter the start time for the schedule on the left and the end time for the schedule on the right.
 - **Every day:** Create a daily recording schedule. Under **During time**, enter the start time for the schedule on the left and the end time for the schedule on the right.

- **Fixed time:** Create a one time schedule (for example, if you are going on vacation, and would like to record all the time). Under **Start time**, enter the exact date and time when you would like the schedule to start and enter the **End time**.

4. Click **Add Schedule**.

To delete a schedule:

1. Existing schedules are shown at the top of the page. Click **Delete** next to the schedule you want to delete.



The screenshot shows the 'Schedule Management' interface. On the left is a blue sidebar with navigation options: Information, Network, Video, Schedule (selected), Email/ftp Alarm, Speaker Alarm, NAS Settings, SD-Card, Scheduling, and Admin. The main area displays a 'Schedule list' with a table. The first row is highlighted in yellow and shows 'Every day' with a time range of '01:30 - 01:50'. To the right of this row are 'Edit' and 'Delete' buttons. The 'Delete' button is highlighted with a red box, and a red arrow points from it to the text 'Click Delete to delete a schedule' on the right. Below the table, there are various settings for the selected schedule, including checkboxes for 'Email/ftp Alarm', 'Speaker Alarm', 'NAS Record', and 'SD-Card Record'. There are also radio buttons for 'Motion triggered' and 'PIR triggered'. At the bottom, there are fields for 'Start time' and 'End time' with dropdown menus for year, month, day, and time. An 'Add Schedule' button is at the bottom right.

Click Delete to delete a schedule

To edit a schedule:

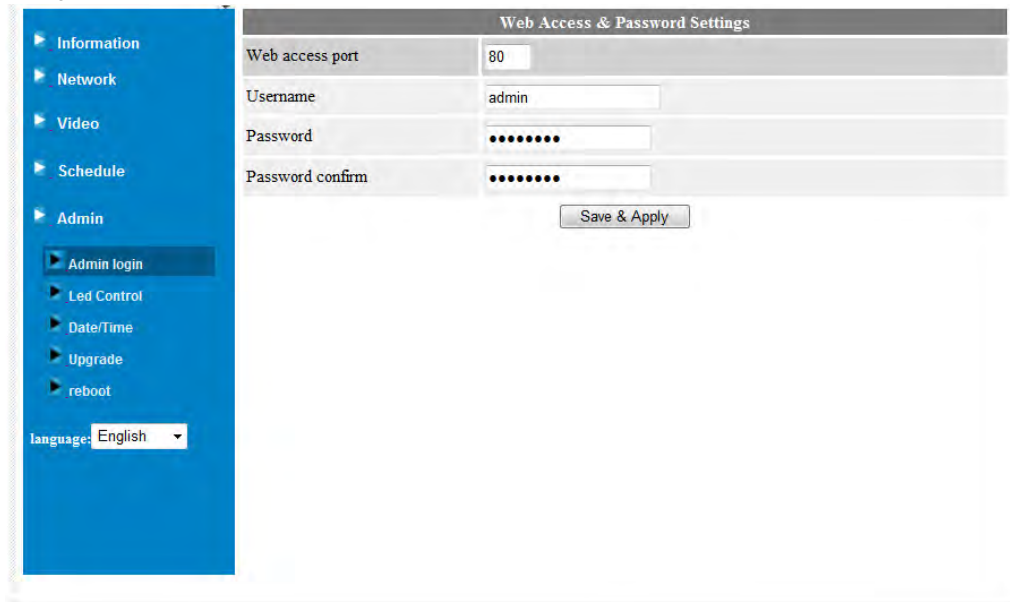
1. Click **Edit** next to the schedule you want to delete.
2. Edit the schedule settings as needed.
3. Click **Update Schedule**.

8.5 ADMIN

Configure the camera date and time, passwords, and LED's. Restart the camera. Perform system upgrades.

8.5.1 ADMIN LOGIN

Configure the admin user name and password for the camera. The admin user name and password are used to login to Web Configure or change settings using apps. Configure the web access port.



To configure the admin user name and password used to login to Web Configure:

1. Under **Username**, enter the desired admin user name for the camera. The default is **admin**.
2. Under **Password**, enter the desired admin password for the camera. By default, the password field is left blank when logging in. Repeat the password under **Password confirm**.
3. Click **Save & Apply** to apply the settings to the camera. Restart the camera by disconnecting and reconnecting the power adapter or pressing the Reboot button (see “Reboot” on page 154).

To configure the Web access port:

For added security, you may change the camera’s web access port. Please note that if you change the web access port, you must enter the camera’s **IP address**, a **colon (:)**, and the **camera’s web access port** when connecting to the camera’s IP address on the local network (e.g. *192.168.0.101:80*).

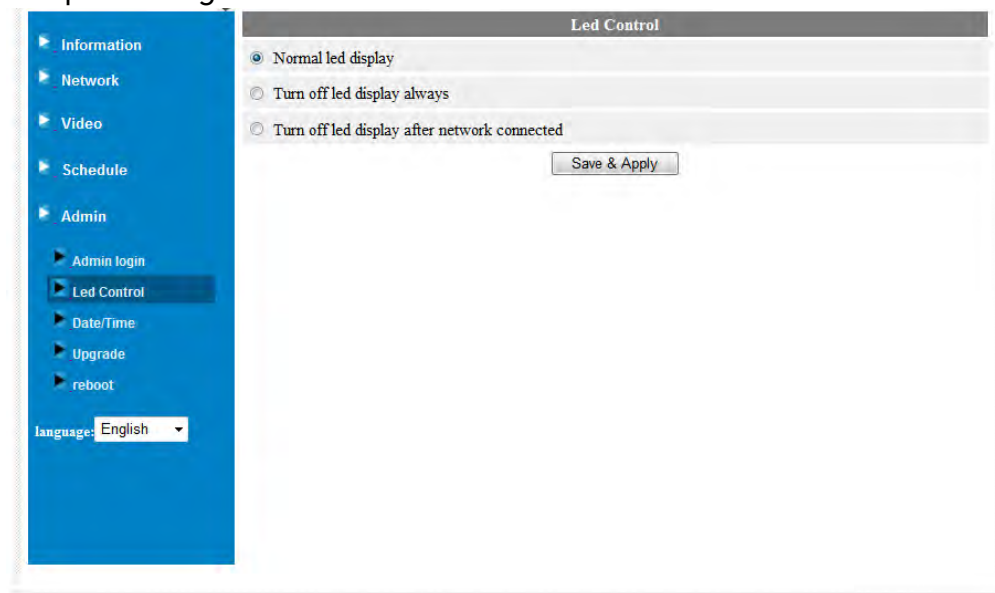
1. Under **Web access port**, enter the desired web access port. It must not be used by any other device on your network. Note that L-View will automatically update the web access port when connecting to Web Configure on the local network.

2. Click **Save & Apply**. Restart the camera by disconnecting and reconnecting the power adapter or pressing the Reboot button (see “Reboot” on page 154).

NOTE: Your computer must be on the same network as the camera to use Web Configure. You may change camera settings over the Internet using the iPhone, iPad, or Android apps.

8.5.2 LED CONTROL

Configure the behavior of the camera status LED's. This is useful if you want the camera to be harder to spot at night.



To configure the LED's:

1. Select one of the following:
 - **Normal LED display:** LED's will function as normal. For details on LED functions, see “Camera Overview” on page 1.
 - **Turn off LED display always:** LED's are turned off at all times.
 - **Turn off LED display after network connected:** LED's turn on when the camera is powered on and turn off once a network connection is made.
2. Click **Save & Apply** to apply settings to the camera.

8.5.3 DATE/TIME

Configure the camera date and time. The camera syncs with an Internet NTP time server to automatically provide the correct time, once you have configured your time zone and daylight savings time settings.

NTP Date/Time Settings

NTP Server: time.windows.com

Time Zone: (GMT-05:00) Eastern Time(USA & Canada)

Daylight Saving Time: ☒ Enable ☐ Disable

Start time: Second Sunday in March

End time: Second Sunday in November

Current Time: 2012/07/27 16:37:05

System Up Time: 0 days 0 hours 0 mins 47 secs

Save & Apply



It is highly recommended to set the date and time when first setting up your system.

Inaccurate time stamps may render your footage unusable for court evidence.

To set the camera date and time:

1. Under **Time Zone**, select your time zone.
2. Select **Enable** under **Daylight Savings Time** if your region observes Daylight Savings Time. Configure the **Start Time** and **End Time** for Daylight Savings Time if needed.
3. Click **Save & Apply** to apply settings to the camera.

8.5.4 UPGRADE

Upgrade the camera firmware. When firmware upgrades are released, they will be available as a free download from www.lorextechnology.com.

NOTE: Your computer must be on the same network as the camera to upgrade the firmware.

To upgrade the camera firmware:

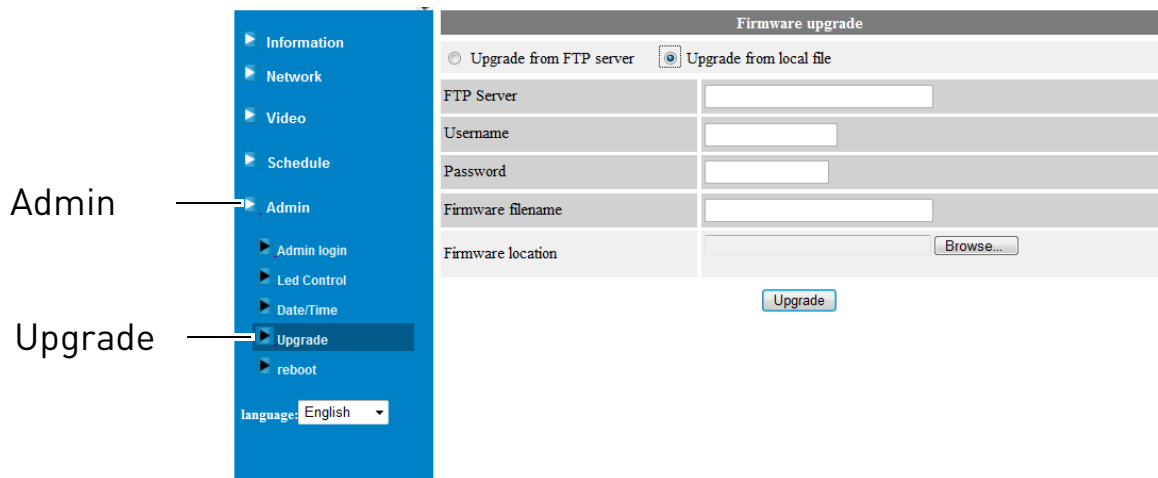
1. Download the free firmware upgrade from www.lorextechnology.com. Unzip the contents of the firmware .zip file to a folder.

2. In L-View, right-click on the camera in Auto Search and click **Web Configure**.

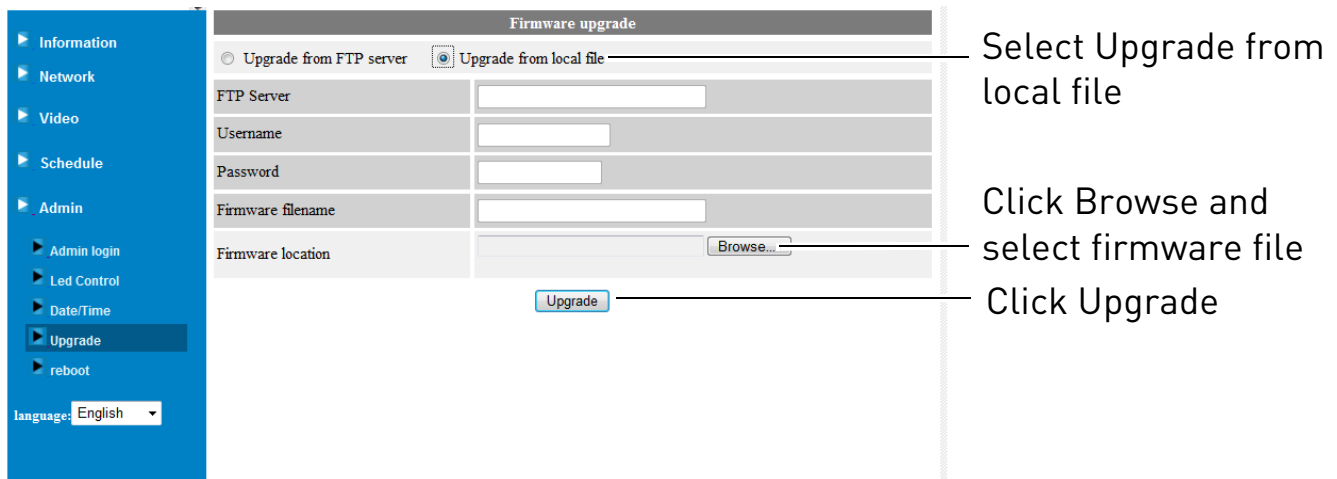


Right-click the camera under Auto Search and click Web Configure

3. Type the camera admin User Name (default: **admin**) and Password (default: **left blank**) and click **Ok** to log into the camera.
4. Click **Admin** then click **Upgrade**.



5. Select **Upgrade from local file**.
6. Click **Browse**, locate the firmware upgrade file, and then click **Open**.
7. Click **Upgrade**. Wait for the firmware upgrade to complete. **Do not disconnect the power or network cable during the firmware upgrade.** The camera will reboot once firmware upgrade is complete.



8.5.5 REBOOT

Restart the camera from your Internet browser. This is useful if you need to restart the camera to apply settings changes or if the camera encounters an error.

To restart the camera:

1. Press the **reboot** button.



9. TECHNICAL SPECIFICATIONS

Mode:	Day & Night	Security:	Web management username/password protection
Power:	DC 5V, 1A (USB)		Video display ID/password protection
Processors:	RISC CPU, hardware video processing and compression.		WiFi WEP and WPA/WPA2 security mode
Network interface:	Ethernet 10BaseT/100BaseTX, Auto-MDIX, RJ-45	Installation, management and maintenance:	Plug & play by ID/password.
Wireless interface:	IEEE 802.11n 90 - 150 Mbps IEEE 802.11g 6 - 54 Mbps IEEE 802.11b 1 - 11 Mbps		Video management software-L-View for video access and multi-camera management
Transmit power:	14.5dBm typically @ 802.11g 17.5dBm typically @ 802.11b		Firmware upgrades Push Notification
Receiver sensitivity:	54Mbps: Typical -73dBm @ 10% PER 11Mbps: Typical -86dBm @ 10% PER		L-View SW upgrade Push Notification
Antenna gain:	0.01 dBi	Web browsing:	Built-in web server for standard web browser access
Image sensor:	RGB VGA 1/4 inch CMOS		Video display on IE browser
	Day and night separate sensors Automatic exposure control, automatic white balance, automatic gain control, automatic brightness control.	Supported protocols:	Video snapshot on any browser
PIR sensor:	Effective distance - 7 meters	Accessories:	IPv4, HTTP, TCP, ICMP, RTSP, RTP, UDP, RTCP, SMTP, SNMP, FTP, DHCP, ARP, DNS, PPPoE, etc.
Light sensitivity:	0.2 Lux (IR LED off) 0 Lux (with 9 meters IR LED on)		Power adaptor, camera bracket, RJ45 Ethernet cable, quick installation guide, CD with installation software and User's Manual.
	Automatically turn on the IR LED on low light environment.	Video management software:	Surveillance software for viewing and archiving up to 4 cameras
Lens:	3.2 mm, F2.0, viewing angle: 60.3°, fixed iris. focus range: 30 cm to infinity	Users	Up to 20 simultaneous unicast users (depends on video settings and internet bandwidth)
Buttons:	Day and night separate lens	Alarm and event management:	Events triggered by PIR and sound detection
Indicators:	One reset button, to factory default settings One WPS button for automatic WiFi setup One LED for Internet connection status indication One LED for Ethernet connection indication One LED for SD card recording indication		Email/ftp alarm message
Video compression:	H.264, baseline profile level 3.1		Push notification on supported mobile devices.
Video streaming:	Separate frame rate/resolution/bandwidth settings for PC and mobile.	Dimensions:	75 x 35 x 128mm/3.0 x 1.4 x 5.1" (W x D x H)
Resolution:	VGA(640x480), QVGA(320x240), QQVGA(160x120)	Weight:	0.28kg/0.62lbs (including camera bracket)
Bandwidth:	64k, 128k, 256k, 512k, 768k, 1M, 1.2M, 1.5M bps	Approvals:	EMC - CE, FCC Part 15 Subpart B Class B Wireless RF - CE, FCC Part 15 Subpart C
Frame rate:	1-5, 10, 15, 20, 25, 30 fps		Power supply: CE, FCC, UL, EN 60950
Audio:	Built-in microphone for audio monitoring Speaker jack for external speaker	Operating conditions	0-50 °C Humidity 20 - 80% RH (non-condensing)
	Audio compression: G.711		

As our product is subject to continuous improvement, Lorex Technology & subsidiaries reserve the right to modify product design, specifications & prices without notice and without incurring any obligation.

10. CLEANING AND DISPOSAL

Clean camera with a slightly damp cloth or an anti-static cloth. Never use cleaning agents or abrasive solvents.

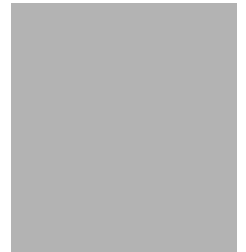
- Do not clean any part of the product with cleaners with thinners or other solvents and chemicals. This may cause permanent damage to the product which is not covered by the warranty. When necessary, clean it with a damp cloth.
- Keep your camera and monitor away from hot, humid, or wet areas or strong sunlight
- Every effort has been made to ensure high standards of reliability for your video monitor. However, if something does go wrong, please do not try to repair it yourself. Contact customer service for assistance.

Disposal of the Device

At the end of the product lifecycle, you should not dispose of this product with normal household waste, but take the product to a collection point for the recycling of electrical and electronic equipment. The symbol on the product, User's Guide, and/or box indicates this.

Some of the product materials can be re-used if you take them to a recycling point. By reusing some parts or raw materials from used products you make an important contribution to the protection of the environment.

Please contact your local authorities in case you need more information on the collection points in your area. Dispose of the battery pack in an environmentally-friendly manner according to your local regulations.



11. NOTICES

Warning: Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the device.

FCC Notice

This device complies with Part 15, subpart C, of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

However, it is imperative that the user follows the guidelines in this manual to avoid improper usage which may result in damage to the unit, electrical shock and fire hazard injury. In order to improve the features, functions, and quality of this product, the specifications are subject to change without notice from time to time.

Caution: To maintain compliance with the FCC's RF exposure guidelines, place the camera at least 20cm (7.87in) from nearby persons.

IC Notice

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: 1) This device may not cause harmful interference, and 2) This device must accept any interference received, including interference that may cause undesirable operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

12. WALL OR CEILING MOUNTING

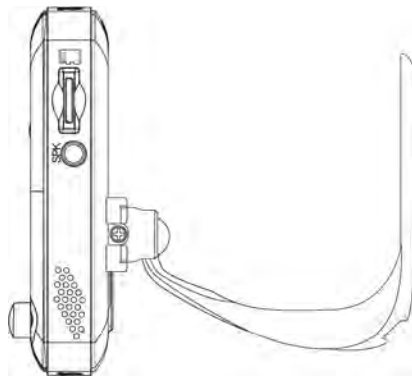
12.1 INSTALLATION TIPS AND WARNINGS

- **Camera is rated for indoor use only.** Do not install in wet or humid areas.
- **MAKE SURE** to run all power adapter and network cables at least **3ft / 1m** away from cribs, bassinets, play yards, and other safe sleep environments for infants.
- Do not point the camera out of a window. The camera will not be able to see at nighttime due to reflection from the Infrared LED.
- Temporarily connect the camera and test it before permanent installation.
- If using the camera with a wireless network, set up the camera's wireless connection before permanent installation.
- Make sure that power adapter cable and ethernet cable (if connecting the camera using ethernet) are long enough to reach the installation location.

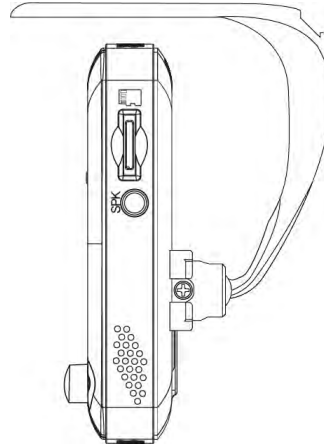
12.2 INSTALLATION

1. Use the camera mounting stand to mark holes for the mounting screws. If you are installing the camera in the ceiling, the screw holes should face the same direction that you would like the camera to point.
2. Drill holes for the mounting screws. If installing in drywall, it is recommended to use the included drywall anchors.

3. Attach the camera to the wall or ceiling using the included mounting screws. Adjust the camera angle as necessary. See below for suggested stand configurations.

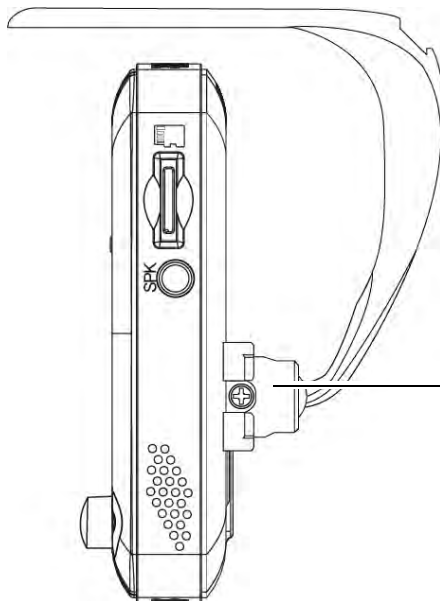


Wall Mount



Ceiling Mount

4. Secure the stand position by using a Philipshead screwdriver to tighten the screw connecting the camera to the stand.



Camera stand screw

5. Connect the power adapter cable and ethernet cable (if connecting the camera using ethernet) to the camera.

13. TROUBLESHOOTING

WPS Wireless Setup does not work or router does not support WPS:

- Connect the camera to the router using Ethernet and manually setup the camera to use WiFi. See “WiFi Setup” on page 21.

WiFi is not working:

- Camera has not been setup to use WiFi. Unless your router supports WPS, WiFi setup must be completed while the camera is connected via Ethernet. See “WiFi Setup” on page 21.
- Incorrect password/network information entered. Re-complete WiFi setup and double-check your WiFi network settings.
- Camera is not in range of WiFi router. Move the camera closer to the WiFi router.
- Interference with other wireless devices is affecting signal strength. Move the camera and/or wireless router further away from any cordless telephones or other wireless devices.

Password required to change settings different than password created:

- Changing settings requires the admin user name and password for the camera. This is a different password than the one used to connect to the camera for video streaming. By default, the admin user name is **admin** and the password is **left blank**.

Forgot password for camera:

- Press and hold the Reset button under the camera for 4 or more seconds to reset the camera to factory default settings. The password will reset to the default password **lorex**.

Camera does not appear in Auto Search or Local Search:

- Camera may be on different network than computer. Press **+** next to camera list and enter the camera ID and password manually. If this does not work, check the network connection.

Cannot access Web Configure on PC:

- Camera may be on different network than computer. Connect the camera and computer to the same network (i.e. the same router), or use a mobile device to change settings over the Internet.

Bright spot in video when viewing camera at night:

- Night vision reflects when pointing a camera to a window. Move the camera to a different location.



LNC100 Series

Version 3.0

www.lorextechnology.com